

# Undergraduate Catalog

## Tennessee State University

VOL. LXIV-1981-1983



Published by  
**TENNESSEE STATE UNIVERSITY**  
3500 Centennial Boulevard,  
Nashville, Tennessee 37203



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## GLOSSARY

### Purpose of Catalog

The Tennessee State University Catalog is the general information publication for the University Community. It is intended to provide information for students and other persons interested in the academic programs and organizations of TSU. In order to understand the activities and programs of the institution it is important for students to know how to use this catalog effectively.

Students should thoroughly familiarize themselves with the General Information section of the catalog. This section answers questions concerning such diverse needs as locations of buildings and other facilities on campus, requirements for admission and graduation, financial aid information, student services, housing regulations, etc.

Students who have already made decisions concerning what area of study they are interested in, such as English, Mathematics, Business Education, Engineering or some other field, should turn to the section of the Catalog dealing with their particular interest for information about courses and degree requirements. The reader will find that schools are arranged in alphabetical order, with course listings by department and course number.

Students who have questions concerning their academic progress, curricula or academic standing should consult their advisors or their academic deans. Those students with specific questions concerning specialized areas of study should consult with each specific department.

Graduate students interested in graduate work should refer to the Graduate Catalog, or inquire at the Office of the Dean of the Graduate School.

Students' guides to the catalog are the index, the table of contents, and the glossary. Major events, holidays, and semester schedules are listed in the University Calendar.

**Academic Good Standing:** An indication that a student meets or exceeds minimum academic requirements to be enrolled at the University.

**Academic Probation:** An indication of marginal academic performance. A warning that a student is in jeopardy of losing academic good standing.

**Accreditation:** Recognition granted schools and colleges upon examination by groups of visiting professionals based upon objective standards developed by interested professional agencies. An accredited school or college has measured up to the standards of quality imposed by professional groups and accrediting agencies.

**Curriculum:** The total program of courses required for a degree in a particular subject.

**Credit Hours:** The number of hours a course meets each week determines its worth in credit hours

**Elective:** A course that is accepted toward fulfillment of credit for a degree but is not required for that degree. So termed because a student "elects" or chooses to take the course.

**Evaluation:** Any credit for academic work completed at another institution and transferred to TSU must be evaluated in terms of the requirements of TSU. Such evaluation is done by the Office of Admissions.

**Full-time Students:** A student who registers for 12 or more credits each semester.

**Grade-point Average:** A student's grade-point average may be computed numerically by dividing the number of quality points earned by the number of hours of coursework attempted.

**Major:** A major is the academic area in which one specializes. A new student may choose a major at once or be classified as "undecided" until he is able to decide on the major he desires.



**Matriculation:** Enrollment in the University or in a particular college or school. This includes payment of fees.

**Minor:** A minor is the academic area in which one places special emphasis as a secondary specialization.

**Non-resident:** A student who is not a resident of the State of Tennessee.

**Part-time Student:** A student who registers for less than 12 credit hours a semester.

**Prerequisite:** Certain courses must be completed before others may be attempted. Such first courses are said to be prerequisites for following courses in the same or similar areas. It is the student's responsibility to check for prerequisites in the current bulletin.

**Semester Hour of Credit:** The semester hour is a unit of academic credit. A student, for example, must earn 132 units or semester hours in order to graduate. The number of hours earned in a given semester is the measure of a student's academic load. A normal load ranges from 12 to 18 semester hours of work. The hours of credit of various courses are indicated in the catalog.

**Transcript of Credit:** A certified copy of credits which a student has earned in high school or in colleges attended. The submission of a transcript is one of the most important prerequisites for admission to the University.



# Academic Calendar, 1981-83

## FALL SEMESTER 1981

August 15, Saturday	Residence Halls open for all students
August 16, 17, 18, Sun-Tue	Freshman Orientation
August 17, Mon	Faculty Institute-Faculty report at 8:00 a.m.
August 18, 19, 20, 21, 22 Tue-Sat	Registration for all students by alphabet
August 24, Mon	Classes begin
September 2, Mon	Labor Day
September 7, Mon	Last day for 75% reimbursement
October 9, Fri	Application for graduation due for students completing degree requirements
October 8, 9, Thurs-Fri	Mid-Semester Examinations
October 23, Fri	Last day to withdraw from courses of University
November 26, 27, Thurs-Fri	Thanksgiving Holidays
December 8, 9, 10, 11, Tues-Fri	Final Examinations for Fall Semester
December 15-January 4	Christmas Recess

## SPRING SEMESTER 1982

January 5, Tue	Faculty Institute-Faculty report at 8:00 a.m.
January 6, 7, 8, 9, Wed-Sat	Registration for Spring Semester
January 11, Mon	Classes Begin
January 22, Fri	Last day for 75% reimbursement
February 5, Fri	Application for graduation due for students completing degree requirements during Spring Semester
February 18-19, Thur-Fri	Mid-semester Examinations
March 8-12, Mon-Fri	Spring Recess
March 5, Fri	Last day to withdraw from courses or the University
April 15-16, Thur-Fri	Final Examinations for graduating seniors
April 27, 28, 29, 30, Tue-Fri	Final Examinations for Spring Semester
May 1, Sat	Commencement Exercises

## SUMMER TERM I, 1982

June 3, 4, 5, Thur-Sat	Registration
June 8, Tue.	Classes Begin
June 14, Mon.	Application for graduation due for students completing degree requirements during Summer Semester
July 9, Fri.	Final Examinations

## SUMMER II, 1982

July 12, Mon	Registration
July 13, Tue	Classes begin
August 13, Fri	Final Examinations
August 14, Sat	Commencement Exercises

## FALL SEMESTER 1982

August 21, Sat	Residence Halls open for all students
August 22, 23, 24, Sun-Tue	Freshman Orientation
August 23, Mon	Faculty Institute-Faculty report at 8:00 a.m.
August 24, 25, 26, 27, 28, Tue-Sat	Registration for all students by alphabet
August 30, Mon	Classes Begin
September 6, Mon	Labor Day
September 10, Fri	Last day for 75% reimbursement
October 15, Fri	Application for graduation due for students completing degree requirements during Fall Semester
October 14, 15, Thur-Fri	Mid-Semester Examinations
October 29, Fri	Last day to withdraw from courses or the University
November 25, 26, Thur-Fri	Thanksgiving Holidays
December 14, 15, 16, 17, Tue-Fri	Final Examinations for Fall Semester
December 20-January 3	Christmas Recess

## SPRING SEMESTER 1983

January 4, Tues	Faculty Institute-Faculty report at 8:00 a.m.
January 5, 6, 7, 8, Wed-Sat	Registration for Spring Semester
January 10, Mon	Classes begin
January 24, Mon	Last day for 75% reimbursement
February 4, Fri	Application for graduation due for students completing degree requirements
February 17, 18, Thur-Fri	Mid-Semester Examinations
March 7-11, Mon-Fri	Spring Recess
March 4, Fri	Last day to withdraw from courses or the University
April 21, 22, Thur-Fri	Final examinations for graduating seniors
May 3, 4, 5 & 6, Tue-Fri	Final examinations for Spring Semester
May 7, Sat	Commencement Exercises

## SUMMER TERM I, 1983

June 2, 3, 4, Thur-Sat	Registration
June 7, Tues	Classes Begin
June 13, Mon	Application for graduation due for students completing degree requirements during Summer Semester
July 8, Fri	Final examinations

## SUMMER TERM II, 1983

July 11, Mon	Registration
July 12, Tue	Classes Begin
August 12, Fri	Final examinations
August 13, Sat	Commencement Exercises

FALL SEMESTER 1983

August 20, Sat	Residence Halls open for all students
August 21, 22, 23, Sun-Tue	Freshman Orientation
August 22, Mon	Faculty Institute-Faculty report at 8:00 a.m.
August 23, 24, 25, 26, 27, Tue-Sat	Registration for all students by alphabet
August 29, Mon	Classes begin
September 5, Mon	Labor Day
September 9, Fri	Last day for 75% reimbursement
October 14, Fri	Application for graduation due for students completing degree requirements during Fall Semester
October 13, 14, Thur-Fri	Mid semester examinations
October 28, Fri	Last day to withdraw from courses or the University
November 24-25, Thur-Fri	Thanksgiving Holidays
December 13, 14, 15, 16, Tue-Fri	Final examinations for Fall Semester
December 19-January 3	Christmas Recess

SPRING SEMESTER 1984

January 3, Tues	Faculty Institute-Faculty report at 8:00 a.m.
January 4, 5, 6, 7, Wed-Sat	Registration for Spring Semester
January 9, Mon	Classes begin
January 20, Fri	Last day for 75% reimbursement
February 10, Fri	Application for graduation due for students completing degree requirements
February 16-17, Thur-Fri	Mid-semester examinations
March 5-9, Mon-Fri	Spring Recess
March 2, Fri	Last day to withdraw from courses or the University
April 19-20, Thur-Fri	Final examinations for graduating seniors
May 1, 2, 3, 4, Tue-Fri	Final examinations for Spring Semester
May 5, Sat	Commencement Exercises

SUMMER TERM I, 1984

May 31-June 1 & 2, Thur-Sat	Registration
June 5, Tue	Classes begin
June 11, Mon	Application for graduation due for students completing degree requirements during Summer Semester
July 6, Fri	Final examinations

SEMESTER II, 1984

July 9, Mon	Registration
July 10, Tue	Classes begin
August 10, Fri	Final Examinations
August 11, Sat	Commencement Exercises



# GENERAL INFORMATION

## THE UNIVERSITY HISTORICAL STATEMENT

The present-day Tennessee State University exists as a result of the merger on July 1, 1979 of the former Tennessee State University and the University of Tennessee at Nashville.

Through successive stages Tennessee State University has developed from a normal school to its current status. By virtue of a 1909 Act of the General Assembly, the Agricultural and Industrial State Normal School was created, along with two other normal schools in the State and began serving students on June 19, 1912.

In 1922, the institution was raised to the status of a four-year teachers' college and was empowered to grant the bachelor's degree. The first degrees were granted in June, 1924. During the same year, the institution became known as the Agricultural and Industrial State Normal College; and in 1927, "Normal" was dropped from the name of the College.

The General Assembly of 1941 authorized the State Board of Education to upgrade substantially the educational program of the College which included the establishment of graduate studies leading to the master's degree. Graduate curricula were first offered in several branches of teacher education. The first master's degree was awarded by the College in June, 1944.

Accreditation of the institution by the Southern Association of Colleges and Schools was first obtained in 1946 and reaffirmed in 1969.

In August, 1951, the institution was granted university status by approval of the State Board of Education. The reorganization of the institution's educational program included the establishment of the Graduate School, the School of Arts and Sciences, the School of Education, and the School of Engineering.

Provisions were also made for the later addition of other schools in agriculture, business and home economics, respectively.



## PRESIDENT'S STATEMENT

The whole Tennessee State University Family is very pleased to know of your interest in us. We are very interested in you, and your total well being. It is hoped that this catalog will provide an answer to some of your questions concerning the University. Additionally, we hope that you will take the opportunity of visiting the campus and become better acquainted with the University.

As a fully accredited, Land-Grant, Urban University, State-supported institution of higher education, we are endeavoring to advance both the concept and the reality of a broad-based institution dedicated to assisting students in their personal development. We are determined to continue our major thrust of producing men and women of highly-trained intelligence and integrity, with a commitment to personal and social values—a commitment that actually does make a difference to those around them. We are very proud of the achievements of our students which compare favorably with other students across the country.

Tennessee State University enjoys the status of an urban university, ideally located in a growing Metropolitan area. The experiences attained here will broaden your many horizons, and you will find that we do care about you and your relationship to your peers, and how the knowledge you receive from us helps you face the many challenges of the 1980's. We welcome you to join us and share our dedication to the development of the individual in an outstanding institution of higher education.

Frederick S. Humphries:  
President

The University was elevated to a full-fledged Land-Grant University by the State Board of Education in August 1958. The Land-Grant University program, as approved by the State Board of Education, included: the School of Agriculture and Home Economics, the Graduate School, the Division of Business, the Division of Extension and Continuing Education, and the Department of Aerospace Studies.

A School of Allied Health Professions was authorized in 1974, from which the School of Nursing was created in 1979. Meanwhile, the School of Business was established in 1974.

Begun initially in 1947 as an extension center of the University of Tennessee, which is based in Knoxville, the University of Tennessee at Nashville only offered one year of extension credit until 1960, when it was empowered by the Board of Trustees of the University of Tennessee to offer two years of resident credit. Authorization was granted to extend this to three years of resident credit in 1963, even though degrees were awarded by the Knoxville unit.

To more fully realize its commitment as a full-function evening university, the Center at Nashville became a full-fledged, four-year, degree-granting institution in 1971 upon successfully meeting the requirements for accreditation of the Southern Association of Colleges and Schools. During the same year, the General Assembly sanctioned the institution as a bona fide campus of the University of Tennessee, and the new university occupied its quarters in the then recently completed building at the corner of Tenth and Charlotte.

It was the erection of the above-mentioned building which gave rise to a decade-long litigation to "dismantle the dual system" of higher education in Tennessee which culminated in the court ordered merger by Judge Frank Gray in February, 1977.

The missions of the two universities, Tennessee State University and the University of Tennessee at Nashville, were highly compatible due to their historic backgrounds or connection to a land-grant institution.



PURPOSE

As a land-grant institution, Tennessee State University has as its mandates instruction, research and service. The University contributes to the advancement of all who seek its services and can profit from its broad educational programs. Tennessee State University stimulates its students and the citizens of Tennessee to reach their full potential through respect for inquiry and appreciation of their cultural traditions, imbues them with the desire to develop basic knowledges and skills that will enable them to succeed in an ever changing world, develops the leadership needed for advancement of society, enlarges the major bodies of knowledge, and applies that knowledge toward the improvement of the quality of life for citizens of the state and the nation.

The University aims:

1. To maintain high standards of instruction in general education, in continuing education, and in the curricula and field of specialization through which degree programs are offered.
2. To encourage faculty and students to engage in research, which advances knowledge in the areas with which the various academic departments and divisions are concerned.
3. To continue expanding its role as a servant and leader of the citizens of the State by disseminating knowledge and providing a broad variety of education services, both credit and non-credit, to the public.
4. To identify and develop the talents of all students who have the potential for college work, including those whose educational, socio-economic, and cultural disadvantages have prevented their being prepared fully to pursue college work successfully without special assistance.
5. To provide a full array of degree programs and services especially tailored to the needs and convenience of college students of all ages, including a full array of degree programs and services for the working adults of the mid-state area.

6. To provide an intellectual atmosphere which stimulates students and faculty to apply knowledge and skills toward the improvement of humanity and the society.

The University's objectives mirror these general and specific purposes. They also reflect the University's priorities. Tennessee State University projects itself to the students, faculty, alumni, and to the citizens of the State through the motto: "Think, Work, Serve."

PROGRAM ACCREDITATIONS (As of June, 1980)

	Year
The Council of Social Work Education Undergraduate NABTE (NCATE) Business Teacher Education	1971
National Council for Accreditation of Teacher Education (Undergraduate)	1968
National Association of Schools of Music	1962
Southern Association of Colleges and Schools	1946
American Home Economics Association	1973
Tennessee Board of Nursing	1973
American Dental Association Commission on Accreditation of Dental and Dental Auxiliary Educational Programs	1973
Reaccreditation by SACS	1969
National League of Nursing National Collegiate Athletic Association	1975
National University Extension Association (FAA) Federal Aviation Agency	1970
Accreditation Board for Engineering and Technology Civil Engineering, Electrical Engineering	1972
Architectural Engineering, Mechanical Engineering	1977

THE CAMPUSES

The University enjoys two campus sites. Its central campus is located between 28th and 39th Avenues, North and is bounded by the Cumberland River on the north and Albion Street on the south, at 3500 Centennial Boulevard. Its sixty-five buildings, parking lots, outdoor facilities, pasture and farm lands occupy some 450 acres.

The downtown campus is housed in a large modern building which is located at Tenth and Charlotte Avenues with adjacent parking facilities.





## MAJOR BUILDINGS

The **Administration Building** is located on Centennial Boulevard between 35th and 36th Avenues, on the south side of the campus. It contains the chief administration offices, the computer center, the general auditorium, which accommodates approximately one thousand persons, the Little Theatre for student productions in drama, and a swimming pool. Originally occupied in 1933, it was renovated and enlarged in 1967.

The **Harned Hall of Science** erected in 1927, is located on the north campus, north of the library. It provides classrooms, lecture auditoriums, laboratories, staff offices and other facilities for instruction and research in the biological sciences.

The **Industrial Arts Building** is located on the south campus at Centennial Boulevard and 35th Avenue, it was renovated in 1975. It contains a variety of laboratories, shops, and classrooms for metal work, plumbing, welding, refrigeration, radio and electricity. Instructional staff offices and the main office for the departments of Industrial Arts and Technology and Architectural Engineering are also located in this building. The School of Allied Health Professions offices, Department of Medical Records Administration, and Respiratory Therapy area are also housed in this facility.

The **Queen E. Washington Health Service Building**, located on the north campus west of Harned Hall, has facilities for complete examination and limited treatment for students; it contains an infirmary, an out-patient department, a clinic, and two wards for confined students, which will accommodate sixteen (16) female and sixteen (16) male students.

The **Marie Brooks Strange Music Building**, erected in 1968, is located on the south campus. It contains many facilities designed to provide instruction in music which include classrooms, listening laboratories, studios for piano and instrumentation, a recital hall seating 226, and faculty offices. The office of the Music Department head is housed in this building.

The **Walter S. Davis Home Economics and Nursing Education Complex** is located on the northeast campus on Centennial Boulevard across from 31st Avenue. It is a three story air conditioned building that contains classrooms and

laboratories for teaching and research in Home Economics and Nursing. The main offices of the departments are located in this complex.

**Goodwill Manor** is a two story colonial type structure that was formerly used as the University President's Residence. This building has undergone major repairs and is presently used as an office building for Alumni Affairs and Public Relations. Plans are being made to renovate the structure and maintain it as an historical university landmark.

**Howard C. Gentry, Health, Physical Education, Athletic and Convocation Complex** is located on the north side of the campus east of the Edward S. Temple Track. This new facility contains a 10,000 seat basketball and convocation arena, an indoor track, handball courts, dance studio, offices, classrooms, and a thirty-five (35) meter swimming pool. The main offices of the Physical Education and Athletics Departments will be housed in this complex. Exterior accommodations will include tennis and handball courts, playing fields, baseball diamond, and parking for 2,000 cars.

**Frank G. Clement Hall** is located on 35th Avenue, south of the Brown-Daniel Library. This structure was formerly used as a men's residence hall. It was renovated in 1969 and serves as a classroom/laboratory building containing the department of Dental Hygiene and the University of Tennessee School of Social Work.

The **Jim Nance McCord Engineering Building**, erected in 1950, is located on 35th Avenue, across from the Brown-Daniel Library. Its laboratories contain equipment for instruction and research in mechanics, combustion, electronics, hydraulics, and the machine shop; other accommodations include classrooms and offices. The office of the Dean of the School of Engineering and Technology and the main offices of the departments of Civil Engineering, Electrical Engineering, and Mechanical Engineering are located in this building. A new two story Engineering Building to be located west of the Frank Young Poultry Plant, is under construction.

The **R. E. Clay Education Building**, erected in 1958, is located on 35th Avenue, south of the Engineering Building. This building is equipped with classrooms and special laboratories for Teacher Education, Psychology, and Reading. The main offices of the departments of Administration, Curriculum and Instruction, Psychology, and Teacher Education are housed in this building. It also houses the office of the Dean of the School of Education.



*The Howard C. Gentry Complex*



*The Administration Building*



*The Martha M. Brown-Lois S. Daniels Library*



The **Martha M. Brown—Lois H. Daniel Library** is located on the south campus at Centennial Boulevard and 35th Avenue, just across from the Engineering and Education Buildings. The ultramodern Library is a three-story contemporary structure constructed of warmtone architectural concrete and coarse aggregate Tennessee River gravel and has cantilevered second and third floors.

The recently completed main Library houses 276,730 volumes and contains subscriptions to 1303 Periodicals with over 24,484 bound periodicals. Built in 1977 at a cost of \$2,400,000, the Library has 82,000 square feet of space with special study and research facilities for faculty and graduate students. A unique special collections room houses the Library's historical archives, theses and special collections.

The Downtown Library, established in the early 1960's as the University of Tennessee at Nashville Library, became a branch of the Main Campus Library concurrently with the merger of the two Universities. The Downtown Library offers a full range of public services, and is fully staffed. Utilizing a book collection of 143,000 volumes, 5,000 microfilm reels, and 224,000 microfiche sheets, the service is further enhanced by subscriptions to 900 periodicals with 16,966 bound periodicals.



*The Walter S. Davis Home Economics and Nursing Complex*

The University Library Learning Resources Center provides audiovisual support to the University. Centers on both campuses circulate many types of media covering a wide range of subject areas. Multi-media study carrels are available for use of these materials by students on an individual basis. An inventory of audiovisual equipment is on hand for loan to faculty for classroom use of media. Facilities, staff, and equipment for the reproduction of slides, transparencies, graphics, video and audio recorded materials are also available through the L.R.C.

The **W.W. Lawson Agriculture Building** is located on the north side of the campus adjacent to the University Agricultural Laboratories. The building contains classrooms and laboratories equipped for teaching and research in scientific agriculture.



*W.W. Lawson Agriculture Building*

The **Student Union Building**, erected in 1959 and added to in 1968, houses the offices of the Vice President for Student Affairs, Student Government Association, and other student organizations. Facilities included in the Student Union Building are lounges, conference rooms, a game room, a grill and fountain, the University Bookstore, and Post Office. It also contains the main cafeteria for University and a faculty/staff cafeteria.

The **Lewis R. Holland School of Business Building** is located on the southwest side of the campus. This building



*The Jane E. Elliott Hall*

contains classrooms, lecture halls, faculty offices, the offices of the Dean of the School of Business and the main office of the departments of Business Administration and Business Education.

The **Physics and Mathematics Building**, completed in the fall of 1965, is located west of the Student Union Building. It houses undergraduates and research laboratories, classrooms, a lecture hall, the academic computer center, faculty offices, and the office of the head of the department of Physics and Mathematics.

The **Jane E. Elliott Hall** (Women's Building) is located west of the Old Library on the north side of the campus. The building contains laboratories, lecture rooms, faculty offices, work rooms, and studios for the fine arts and crafts. The main offices of the departments of Art, Social Welfare, and Sociology are housed in this building as is the office of the Dean of Extension and Continuing Education.

The **Hubert B. Crouch Hall** (Graduate School) located directly west of the Administration Building contains classrooms, laboratories, faculty offices, and offices for the Dean of the Graduate and the Dean of the School of Arts and Sciences. Also located in this building are the main offices for the departments of Communication, Government and Public Affairs, History and Geography, Modern Foreign Languages, Speech Pathology and Audiology.



# STUDENT INFORMATION

**This section includes information on the following:**

- ADMISSIONS
- FEES
- FINANCIAL AID
- PERSONNEL SERVICES
- ACADEMIC INFORMATION



# ADMISSION TO THE UNIVERSITY

**Admission of Freshmen**  
Applicants for admission to the freshman class should submit their application material as early as possible in their senior year of high school.

Applicants should request high schools to send transcripts including all semesters of high school credits except the final semester credits as soon as grades are available. Applicants are requested to furnish supplementary records immediately following graduation from high school.

- First-time Freshmen General Requirements**
1. All students will be required to submit an application for admission and a \$5.00 non-refundable processing fee for admission.
  2. Any student desiring to be admitted without any conditions must have submitted an application, an application fee, and all documents (transcripts) at least 45 days prior to the semester of intent.

- I. Regular Admissions
- A. In-State Students  
For regular admission, an applicant must attain a minimum composite score of 10 on the ACT or SAT equivalents, or have a minimum grade point average of 2.00 on the high school record (4.00 system). Starting with the Fall Semester 1985, in-state first-time freshmen must possess the following:

Year	GPA	or	ACT
1984	2.00		10
1985	2.00		12
1986	2.00		12
1987	2.00		14
1988 & beyond	2.00		14

- B. Out-of-State Students
- For regular admission, starting with the Fall Semester—1981, First-time out-of-state freshmen must possess the following:

Year	GPA	or	ACT
1981	2.25		13
1982	2.35		14
1983	2.40		15
1984 & beyond	2.50		16

- II. Regulated Admission
- A. Applicants who do not possess the acceptable grade point average or ACT/SAT equivalent and are graduates of an approved private or public high school may be permitted to enroll in a regulated program of study.
  - B. Applicants admitted under regulated status must complete courses specified by advisors with grades "C" or better. Such specified courses must be completed in the first two semesters and first summer of enrollment in order for the student to be continued in the University. Upon completion of these requirements the Regulated Admission Status will be removed.
  - C. Such regulated admissions must have the approval of the Dean of Admissions and Records in consultation with the Vice President for Academic Affairs and the President of the University. The number of students permitted to enroll in this category will not exceed five percent (5%) of the total number of first-time freshmen admitted in any given term, or 100 students, whichever is greater.

- III. Admission Based on High School Graduation
- A. Students seeking admission based upon high school graduation from an approved private or public school must submit a high school transcript indicating date of graduation and completion of necessary units as stipulated by academic departments. Any student who is deficient will be required to remove the deficiencies.

- B. Applicants twenty-one years of age and over will be admitted with high school transcripts. Such applicants will be encouraged but not required to take the ACT.

- IV. Admission Based on GED Test
- Any student desiring admission based on the General Education Development Test must be at least age 18, and submit a minimum composite score of 45. A high school transcript will be requested. Such applicants must also take the ACT and make a composite score of 10, if instate and 13, if out-of-state. Students failing to achieve these ACT scores may be admitted under the regulated program.
- V. Any or all students may be required to take one or more tests designed to measure general education achievement and/or achievement in selected major areas as a prerequisite to graduation, for the purpose of evaluation of academic programs. Unless otherwise provided for any individual program, no minimum score or level of achievement is required for graduation. Participation in testing may be required for all students, for students in selected programs, and for students selected on a sample basis.

**Early Admission**

High school seniors may be admitted to the University for the purpose of enrolling in Freshman English, History or Mathematics. Applicants must possess a 3.00 grade point average on a 4.00 system for the high school work completed or a composite standard score of 16 on the ACT. The recommendation of either the principal or guidance counselor at the student's respective high school must accompany the application and high school transcript.



Three semester hours of credit will be awarded for each 45 clock hours of acceptable classroom performance by each student. Students may enroll in a maximum of six (6) credit hours at any given term.

#### HOURS ATTEMPTED

0-14  
15 to 29 hours  
30 to 50 hours  
51 to 67 hours  
Above 67 hours

#### REQUIRED GRADE POINT AVERAGE

No minimum GPA  
Not less than a 1.4 cumulative average  
Not less than a 1.7 cumulative average  
Not less than a 1.9 cumulative average  
Not less than 2.0 cumulative average

To qualify for admission **by transfer from an out-of-state college or university** a student must have, as a minimum, an over-all 2.00 grade point average.

All transfer grades will be used in computing the average required for admission. Students transferring from a junior or community college must complete 60

hours credit for the bachelor's degree at TSU. Furthermore, any student dismissed from a college or university for academic reasons, must be eligible to re-enter that institution prior to acceptance at TSU. Credit earned at other accredited colleges and universities will be assigned by the Office of Admissions and Records once the student enrolls at TSU.

## Re-admission—TSU Students

Students who leave the University voluntarily and who do not enroll for courses during one or more regular semesters must contact the Office of Admissions and Records to request an update of their admission file. Summer is considered a regular semester in determining absence from the University if the student has taken courses at another college or university. Students who return to TSU after attending other accredited colleges or universities must submit official transcripts of all coursework. A written request must have been received by the Admissions and Records Office two weeks prior to the regular scheduled registration as designated in the academic calendar.



## Transfer Students

All students seeking advanced standing must submit official transcripts of all college credit earned. A student will be considered a transfer student if he has taken any college work at another institution.

To qualify for admission **by transfer from a college or university in the state of Tennessee**, a student must meet the following grade point average requirements:

Admission may be subject to the approval of the Committee on Admissions and Readmissions. If a student wishes to appeal a decision on admission, he must request an appeal hearing by submitting a written request two weeks prior to the regular registration for the semester in which he wishes to matriculate. Such appeals will be heard by the Committee on Admissions and Readmissions. Students whose records do not meet standards for admission as transfer students, may be admitted by the committee on academic probation if the committee finds justification for such action.

## Admission with Advanced Standing from Accredited Institutions

Students who have attended other accredited colleges or universities may apply for admission to Tennessee State University with advanced standing by fulfilling the following requirements:

1. File an official transcript of records from all high schools, colleges or universities previously attended, whether or not the applicant wishes to receive credit for such work.
2. Present a letter of honorable exit from the last institution attended.



Admission with Advanced Standing from Non-Accredited Institutions

Students who desire to enter Tennessee State University from non-accredited colleges may register under the following stipulations:

1. Present an official transcript showing a grade point average of 2.00.
2. Since the Fall of 1974 Tennessee State University has been operating under the semester system. All transfer credits from institutions not on the semester system will be converted to semester credits. Cumulative averages are computed on the basis of "A" equals four quality points for credit hour.

The fees charged per semester hour will be the same as other undergraduate courses.

## INTERNATIONAL STUDENTS

International students with superior scholastic records are considered for admission as freshmen and as transfer students. An applicant whose native language is not English is required to submit a test score of 500, as the minimum acceptance level of performance on the Test of English as a Foreign Language, (TOEFL).

Students who wish to take the test should write directly to TOEFL, Educational Testing Service, Princeton, New Jersey 08540. The application, complete official scholastic records, and TOEFL score must be in the Office of Admissions at least 60 days before the beginning of the semester in which admission is desired. If complete documents are not on file by this deadline, the application will be considered for the next scheduled registration period. The application must be accompanied by a nonrefundable fee of \$5.00.

International applicants must indicate the availability of sufficient funds to meet all costs while studying at the University.

For more information contact:  
International Student Advisor  
Tennessee State University  
Nashville, TN 37203

## SATISFACTORY PROGRESS REQUIREMENTS

The University's position with respect to satisfactory progress and the so called "perpetual student" is as follows. The "perpetual student" is herein defined as one who has been dropped from the University for academic reasons, who remains out of school for the suspended period, and who re-enrolls at the University after the suspension period on a repeated basis, while at the same time not making significant progress toward the completion of a degree or certificate requirement during the periods of enrollment.

The University's definition of satisfactory progress provides for special consideration for what are felt to be "marginal" students or slow starters. The institution deems such students to be making "satisfactory progress" if they complete a normal four year undergraduate course of study (without changing programs) in five academic years.

The University, however, remains committed to its role of academic excellence, of recruiting and teaching academically superior students, while at the same time developing educational programs, techniques, devices, and expertise to train and educate the "marginal" student or slow starter.

To be in compliance with the satisfactory progress requirements of the Higher Education Amendments of 1976, and thereby establish or maintain eligibility to receive Title IV funds (BEOG, SEOG, NDSL, CWS, GSL, SSIG) at Tennessee State University, a student:

- must meet the minimum academic standards set by the University with respect to good standing. (See catalog)
- must be proceeding toward fulfilling the degree or certificate requirements.
- must not have been dropped from University for academic reasons for more than two times. A student who has been dropped from the University for a third time, for academic reasons will not be eligible to receive Title IV funds when s/he re-enrolls at the University. Such student will remain ineligible to receive Title IV funds until s/he achieves a cumulative grade point average or semester grade point average of 2.0 on a four point scale.
- on probation for academic reasons, and allowed to enroll in the University for a succeeding semester must during that semester raise his/her cumulative average above probation status as defined in this catalog, or make at least a 2.0 average on a four point scale.

## CLASS LOADS NORMAL AND MINIMUM CLASS LOADS

The normal class load for a full-time undergraduate student is 15 to 18 credit hours per semester, and the minimum class load is 12.0 credit hours per semester. One semester hour credit of required physical education (PE. 11-94 series or one semester hour credit of aerospace studies at the 100 or 200 level) may be added to the normal load.

A regular student is expected to carry the full curricular load officially designated for the given semester of his classification. However, the class load may be reduced because of poor scholarship, because the student must work or upon the advice of the Dean of the School in which the student is registered.

Freshmen who score less than 15 on the ACT and have a high school GPA of less than 2.00 are encouraged to enroll in no more than 15 credit hours for the first semester of enrollment.

## PROBATIONARY STUDENT CLASS LOADS

A student who incurs scholastic probation in any semester (see scholarship standards) will be allowed to carry a maximum of 15 semester hours.

## MAXIMUM CLASS LOADS

Freshman may not elect hours in excess of their full curricular load. Sophomores, juniors, and seniors whose cumulative grade-point averages are 3.00 or above may register for as many as three credit hours in excess of the normal curricular load—up to a total of 21 credit hours.

Seniors whose grade-point averages are 2.00 or above may register for as many as three credit hours in excess of their full curricular load up to a total of 21 credit hours.

In all cases, the student must apply to his School Dean who may approve request for such increases in class loads. The School Dean must notify the Admissions Office in writing of each case which he approves.



## POLICY ON EXCESSIVE ABSENCES

Students are expected to attend classes regularly. Instructors will keep an accurate record of class attendance and be able to report, on official request, the number of absences of any student in class. At any time from the beginning of classes up until the end of the 7th week of classes (2nd week for Summer I and II) an instructor may report a student for unsatisfactory attendance. Reporting a student is at the discretion of the individual instructor, with the understanding that "excessive" absences is defined as no less than one more than the number of times a class meets per week, exclusive of any administratively approved absences. Any student reported for excessive absence from class will be barred from further attendance in that class until he is formally readmitted by the instructor.

Instructors will report promptly any excessive absences to the Registrar using the form provided by the Office of Admissions and Records. ANY SUCH REPORTS MUST ARRIVE IN THE OFFICE OF ADMISSIONS AND RECORDS NO LATER THAN 5:00 P.M. on the last day of the 7th week of classes for regular semesters (2nd week of classes for Summer I and II). (Excessive absences after the 7th week should also be reported promptly.) Admissions and records will notify the student by mail of the fact that he has been reported for excessive absence and the student may withdraw from the course officially, or formally apply to the instructor for readmission to the class, or accept a mandatory grade of "F" for the course.

## SUBSTITUTION OF COURSES

Requests to substitute courses required in the curriculum are presented to the Head of the Department in which the student is registered. If the Department Head approves the request, it is forwarded to the Dean of the School for approval. Requests for substitutions must be made no later than the semester preceding the one in which the student expects to graduate. Substitutions must not violate the minimum University requirements for a Bachelor's Degree.

## WITHDRAWING FROM A COURSE

The proper forms for withdrawing from a class will be provided by the Office of Admissions and Records. Withdrawal is official only after the form has been completed, signed by the instructor, and submitted to the Office of Admissions and Records. A student may receive a grade of "W" if he withdraws according to the following schedule:

Regular Semester.....	prior to the last day of the 9th week of classes
Summer Sessions I & II.....	prior to the last day of the 3rd week of classes.

After the above deadlines, the student must be assigned a grade of "F". Withdrawal from the University must be documented by the student and approved by the Vice President for Student Affairs, e.g., health problems, or other circumstances beyond the student's control.

## CLASS ATTENDANCE

Students are expected to attend regularly all courses in which they are enrolled for credit and to complete all required work in such courses. Irregular attendance or any substantial number of unexcused absences may weigh adversely in the consideration of grades or any petition for a special academic privilege such as make-up examination.

Freshmen are permitted no more unexcused absences from a course than the number of credit hours assigned to that course. (Thus, in a three-credit hour course, three unexcused absences are permitted.) Freshmen who violate this regulation may be dismissed from Tennessee State University.

All excuses for absences must be secured through the Office of the Vice President for Student Affairs. In addition, the student should inform each of his teachers as to the cause of his absence.

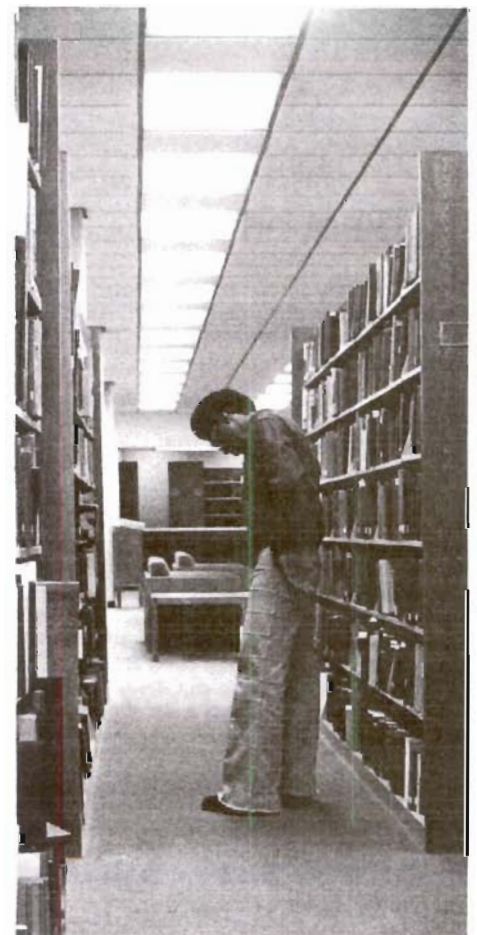
Regular Monday, Wednesday, and Friday classes during the academic year begin on the hour and end 10 minutes prior to the hour. Regular Tuesday and Thursday classes are scheduled for 75 minute periods and are separated by 10 minute intervals. Some classes meet for periods of time that vary from these patterns. These are designated in the published semester schedules. Punctuality in attending classes is expected of all students. Official registration is required before classes are attended.

## CLASS AUDITORS

Regularly enrolled students may enter classes as auditors with the approval of the major adviser and the teacher of the course. The regular registration procedure is followed in registering for a class to be audited.

Persons other than regularly enrolled students may be permitted to audit class only with the approval of the teacher of the course. Such persons shall follow the regular registration procedure.

Auditors are not under obligation of regular attendance, class preparation, recitation, or examination; nor do they receive credit. The student should notify the computer terminal operator at the course entry station of his intention to audit a course or course.





# GENERAL FEE INFORMATION

Tennessee State University reserves the right to increase the charges listed herein or to add new ones whenever such increases or additions become necessary.

The listing of any fee or incidental charges in this catalog does in no way constitute a contract between the University and the student. As a condition of registration each student must pay the fee in effect at the time he registers.

## PAYMENT OF FEES

All fees must be paid at registration. An exception to this is when a student is sponsored by a University approved agency or organization. Scholarship students should check with their sponsors to ascertain that proper authorization has been forwarded to the office of the Bursar prior to the date of registration.

All money orders, cashier checks or certified checks must include the student's social security number and should be made payable to Tennessee State University and sent to the Vice President for Business Affairs, Tennessee State University, 3500 Centennial Blvd., Nashville, Tennessee 37203.

## SENDING OF MONIES THROUGH THE MAIL

The University assumes no responsibility for monies lost through the mail. Students are advised not to send cash and all monies should be sent to the Vice President for Business Affairs, Tennessee State University, 3500 Centennial Blvd., Nashville, Tennessee 37203.

# GENERAL

All fees listed on this sheet are quoted on a semester basis. These fees for 1981-83 supersede all previous publications of fees for 1981-83. FEES ARE SUBJECT TO CHANGE WITHOUT NOTICE.

**Application Fee**—An application fee of \$5 is charged for processing all applications for admission to the University. A money order or certified check for \$5 (payable to Tennessee State University) must accompany the application.

## SPECIAL FEES

Add/Drop (per form)	\$ 5.00
Application Fee	5.00
Auto Restricted Parking Registration (academic year)	30.00
(summer)	10.00
Bad Check Charge	5.00
Child Care (Downtown Campus)	1.00/hr.
first child-.25/hr. each	
additional child	
Class Audit same as for credit	
Conference-600 (per sem.)	25.00
Credit by Examination (per course)	15.00
Duplicate I.D. Card	10.00
Graduation Fee	20.00
Graduate Oral Exam	15.00
Graduate Record Examination	15.00
Incomplete Project Writing (after 3 sem. hrs.)	15.00
Incomplete Thesis Writing (after 4 sem. hrs.)	25.00
Late Registration	10.00
Locker Rental (Downtown per term)	1.50
Meal Card Replacement	15.00
Master's Thesis Binding	30.00
Music Instrument Lessons (per course)	15.00
Nursing Lab Fee	10.00
Organ Lessons (per course)	30.00
Property Damage Fee	Actual
Room Deposit	40.00
Tests, ACT	8.00
Tests, GED	10.00
Voice Lessons (per course)	15.00

\*The Tennessee State General Assembly authorizes public colleges and universities to charge a \$1 per student assessment for the benefit and support of Student Government and Student Life activities. In March of 1979 pursuant to a vote of the general student body, Tennessee State University authorized the implementation of this assessment. Your current fees include this \$1 charge.

\*\*Room and board charges for graduate students who wish to live on campus are the same as undergraduate students.

## ELDERLY AND DISABLED

Pursuant to Tennessee Code Annotated, Section 49-3251, as amended by Chapter 842 of the Public Acts of 1980, an authorized service fee is applied at the rate of \$12/hr. not to exceed \$75 for undergraduate students and \$15/hr. not to exceed \$75 for graduate students.

# INCIDENTAL FEE SCHEDULE

## APPLICATION FEE—\$5.00 Non-refundable

This is a one-time fee paid by an individual who applies for admission to the University. This fee is not required of a graduate student if there already is an application for undergraduate school on record or a readmission to the university. A money order or certified check for \$5.00 payable to Tennessee State University must accompany each application.

## IDENTIFICATION CARD

The University issues to each student an identification card which certifies that he/she is enrolled as a student in the University. There is no charge for the original card. A charge of ten (\$10) dollars is required for its replacement. This identification card which includes the student's photograph is required for registration, all financial transactions, borrowing of library books, and other purposes.

## MOTOR VEHICLE REGISTRATION—\$5.00 and \$10.00 Non-refundable

Any person who expects to operate and park an automobile on campus must register the automobile with the Security Office and pay for an official permit. The fees are \$10.00 for the academic year and a fee of \$5.00 for the summer. This amount is non-refundable.

## RESTRICTED PARKING REGISTRATION—\$30.00 and \$10.00 Non-refundable

Any person who wishes to park an automobile on a restricted parking lot may do so by purchasing a restricted parking permit from the Security Office. The fee of \$30.00 for academic year, and a fee of \$10.00 for summer; this amount is non-refundable.



TRAFFIC FINES—

Non-refundable

All fines imposed by the University are to be considered receivables and must be paid at the office of the Bursar.

LATE REGISTRATION—

\$10.00

Students who do not complete registration during the official registration period will be charged \$10.00.

FINANCIAL REGULATIONS

No student will be allowed to register, obtain diploma, degree or transcript until all accounts are settled. A student will not be officially enrolled until all fees are paid through the office of the Bursar.

Tennessee State University  
Fees 1981-82

Undergraduate Tennessee Students

	Hours	1 hr.	2 hrs.	3 hrs.	4 hrs.	5 hrs.	6 hrs.	7 hrs.	8 hrs.	9 hrs.	10 hrs.	11 hrs.	12 hrs.
Maintenance Fee		\$31.00	62.00	93.00	124.00	155.00	186.00	217.00	248.00	279.00	310.00	327.00	327.00
Debt Service Fee		3.00	6.00	9.00	12.00	15.00	18.00	21.00	24.00	27.00	30.00	33.00	35.00
Student Government		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Total		35.00	64.00	103.00	137.00	171.00	205.00	239.00	273.00	307.00	341.00	361.00	363.00

Undergraduate Out-of-State Students

	Hours	1 hr.	2 hrs.	3 hrs.	4 hrs.	5 hrs.	6 hrs.	7 hrs.	8 hrs.	9 hrs.	10 hrs.	11 hrs.	12 hrs.
Maintenance Fee		31.00	62.00	93.00	124.00	155.00	186.00	217.00	248.00	279.00	310.00	327.00	327.00
Tuition		66.00	132.00	198.00	264.00	330.00	396.00	462.00	528.00	594.00	660.00	726.00	765.00
Debt. Service Fee		3.00	6.00	9.00	12.00	15.00	18.00	21.00	24.00	27.00	30.00	33.00	35.00
Student Government		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Total		101.00	201.00	301.00	401.00	501.00	601.00	701.00	801.00	901.00	1001.00	1087.00	1128.00

Room—Watson, Boyd, Eppse, and Wilson Halls .....	467.00
Hankal .....	432.00
Hale .....	485.00
Board .....	428.00

Graduate Tennessee Students

	Hours	1 hr.	2 hrs.	3 hrs.	4 hrs.	5 hrs.	6 hrs.	7 hrs.	8 hrs.	9 hrs.	10 hrs.	11 hrs.	12 hrs.
Maintenance Fee		41.00	82.00	123.00	164.00	205.00	246.00	287.00	328.00	369.00	413.00	413.00	413.00
Debt Service Fee		3.00	6.00	9.00	12.00	15.00	18.00	21.00	24.00	27.00	30.00	33.00	35.00
Student Government		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Total		45.00	89.00	133.00	177.00	221.00	265.00	309.00	353.00	397.00	444.00	447.00	449.00

Graduate Out-of-State Students

	Hours	1 hr.	2 hrs.	3 hrs.	4 hrs.	5 hrs.	6 hrs.	7 hrs.	8 hrs.	9 hrs.	10 hrs.	11 hrs.	12 hrs.
Maintenance Fee		41.00	82.00	123.00	164.00	205.00	246.00	287.00	328.00	369.00	413.00	413.00	413.00
Tuition		66.00	132.00	198.00	264.00	330.00	396.00	462.00	528.00	594.00	660.00	726.00	765.00
Debt Service Fee		3.00	6.00	9.00	12.00	15.00	18.00	21.00	24.00	27.00	30.00	33.00	35.00
Student Government		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Total		111.00	221.00	331.00	441.00	551.00	661.00	771.00	881.00	991.00	1104.00	1173.00	1214.00

Room—Watson, Boyd, Eppse, and Wilson Halls .....	467.00
Hankal .....	432.00
Hale .....	385.00
Board .....	428.00



**GRADUATION FEE—\$20.00**

Each candidate for a degree must pay this graduation fee to cover the cost of cap and gown and other incidentals involved with graduation. This fee must be paid thirty days before graduation.

**BAD CHECK FEE—\$5.00 per check Non-refundable**

All checks given the University are expected to clear the bank on which they are drawn. If a check is returned, all fees are assumed to be unpaid and the above service charge is assessed on each check. Check writing privileges may be revoked for any individual who has checks returned by his bank.

**CHANGE OF COURSE OR SECTION FEE—\$5.00 per form Non-refundable**

Any student who adds or drops a course or section will be charged this fee. If the change is caused by the institution, there is no charge.

**THESIS FEE—\$30.00 Non-refundable**

Any graduate student completing a thesis is required to present a receipt from the Business Office to the Graduate Office verifying that his fee has been paid.

**LIBRARY FINES—Non-refundable**

All fines imposed by the University Library are considered receivable and must be paid at the Library.

**AUDITING FEE—**

Persons other than regularly enrolled students may be permitted to audit classes only with the approval of the teacher of the course. Such persons must follow the regular registration procedures and pay an amount based on the degree credit fee.

Tennessee State University has a broadly based financial aid program. Therefore, an applicant may apply for and receive aid from one or more programs at the same time. Since the University cannot supply funds to cover the financial needs of all its students, students are also urged to investigate and seek aid from sources outside the University. Fair and equal consideration is given all applicants without regard to race, color, sex, handicap condition, or religious beliefs in keeping with program regulations.

We use the College Scholarship Service as our major clearinghouse for need determination. All students who want to be considered for aid are requested to fill an Application for Financial Aid and a Financial Aid Form (FAF) each year, according to instructions given on both forms. (We also accept the Family Financial Statement of ACT.) Undergraduate students should also apply for a Basic Educational Opportunity Grant (BEOG) by checking the appropriate item "yes" on the FAF form.

The Financial Aid Form and the Application for Financial Aid may be obtained at the local high school guidance counselor's office. These forms are also available in the Financial Aid Office here at the University and can be received through the mail upon request.

All students are required to submit a processed BEOG Student Eligibility Report (SER) to the Financial Aid Office in order to receive a complete award package. Students who do not submit the completed SER will receive a partial award taking into consideration the student's expected BEOG amount.

The sources of aid are:

**College Work Study Program**—A part-time employment program that is a product of the Economic Opportunity Act of 1964. It is jointly funded by the Federal Government and the University.

**College Work Aid Program**—Provides part-time employment on campus from University funds.

# FINANCIAL AID

**Supplemental Educational Opportunity Grant**—A program that provides a gift grant which is federally funded and is a product of the Higher Education Act of 1965.

**National Direct Student Loan**—Provides low interest loans to eligible students and is a product of the National Defense Education Act of 1958.

**Basic Educational Opportunity Grant**—Provides gift grants to eligible students and is federally funded.

**Nursing Student Loan**—Provides low interest loans to eligible nursing students and is federally funded.

**Tennessee State University Scholarship Grant**—Provides gift grants to eligible students and is institutionally funded.

**Law Enforcement Education Program**—Provides loans and/or grants to eligible students. Authorized under Title I, Part D, Section 406 of the Omnibus Crime and Safe Streets Act of 1968.

**Academic Work Scholarship**—Provides employment of an educational nature and is awarded to Tennessee high school graduates who graduated in the top quartile of their graduating class.

**Guaranteed Student Loan**—Enables students to borrow directly from banks, credit unions, savings and loan associations and other participating lenders who are willing to make educational loans. Further details may be obtained by making inquiry in the Financial Aid Office. Tennessee State University has been approved to participate in this program to a limited extent as a lender of last resort through the Tennessee Student Assistance Corporation. The loans of last resort are available only to students who are residents of the State of Tennessee.

**Departmental and University Scholarships**—Provides scholarships from business and industry through the different departments of the University. The scholarship program is administered through the scholarship committee. (See the list at the end of this section for the particular requirements for each scholarship.)



## ELIGIBILITY

A student must meet program eligibility requirements, have financial need, be enrolled or accepted for enrollment. In case of the SEOG, the student must show academic and/or creative promise. The student who seeks aid, as well as all other students, is expected to estimate his expenses for the year. These expenses would include: tuition and/or fees, room and board, books and cleaning, transportation, laundry and cleaning, recreation and personal expenses.

The Tennessee State University believes that there should be no economic or racial barriers to Higher Education. Therefore, the aim of the Financial Aid Program is to provide adequate financial assistance for deserving students who should give evidence of academic and creative promise and the capability of maintaining academic progress in their course of study.

- D. Refund of Residence Hall Rent. Refunds of residence hall rent after registration will be prorated on a weekly basis when a student is forced to withdraw from the residence hall:
  1. Because of medical reasons confirmed in writing by a licensed physician, or
  2. At the request of the institution. Full refund will be made in the case of death. No refund will be made other than under the above conditions.
- E. Refund of Residence Hall Reservation and Breakage Deposits. Full deposit will be refunded if:
  1. The University is notified a minimum of 14 calendar days prior to the first official day of registration.
  2. The student is prevented from entering the University because of medical reasons confirmed in writing by a licensed physician, or
  3. Residence hall space is not available.

Full refund will be made in the case of death.

## REFUND PROCEDURES

Refund procedures for maintenance fees, out of state tuition, and debt service fees are as follows:

- A. Change of a student's status which requires a refund:
  1. Change in a full-time student's schedule which results in the reclassification to a part-time student, or
  2. Change in a part-time student's schedule which results in a class load of fewer hours.
- B. Situations which require a refund:
  1. Dropping a course or courses,
  2. Withdrawing from the University,
  3. Cancellation of a class by the University, or
  4. Death of a student.
- C. Refund Procedures:
  1. 75% of fees will be refunded for drops or withdrawals within 14 calendar days after the first official day of classes or within an equivalent period for a short-term course. No refund will be made thereafter.
  2. 100% of fees will be refunded for classes cancelled by the institution.
  3. 100% fees will be refunded for drops or withdrawals prior to official registration for the regular academic term and prior to the beginning of summer term and intersession classes.
  4. 100% of fees will be refunded in case of death.

## DISABLED PERSONS AND ELDERLY PERSONS

Disabled persons suffering from a permanent total disability which totally incapacitates such person from working at an occupation which produces an income and persons who will be sixty (60) years of age or older, before the end of the semester and who are domiciled in Tennessee, may audit courses without paying tuition charges, maintenance fees, student activity fees, or registration fees. However, this privilege may be limited or denied on an individual classroom basis according to space availability. Prior to admittance, the University may require an affidavit or certificate from a physician or an agency charged with compensating the disabled person or adjudicating the permanent total disability of the person requesting admittance to classes.

Subject to the same terms and conditions as provided above disabled persons as defined above and persons who will be sixty-five (65) years of age or older before the end of the semester, and who are domiciled in Tennessee, may enroll in courses for credit without payment of tuition charges, maintenance fees, student activity fees or registration fees. However, such students must pay a per hour service fee, and all laboratory fees must be paid in full.

## CRITERIA FOR CONTINUED ELIGIBILITY FOR COLLEGE BASED, BEOG AND GSL PROGRAMS

To continue to be eligible to participate in College Based, BEOG, and GSL Programs, a student must continue to meet minimum academic requirements, be in good standing in accordance with University standards, be in compliance with the University's satisfactory progress requirement and satisfy all program and institutional regulations. Additionally, a student must:

- submit a BEOG application and/or other need determiner each year.
- submit a financial aid application at least once each year.
- submit appropriate affidavit.
- be accepted for enrollment or currently enrolled on at least a half-time basis.
- show evidence of academic or creative promise.
- show financial need.
- be a national or citizen of the United States.
- not have been dropped from the University for academic reasons for more than two times.
- not owe a refund to a grant program or be in default on a loan.

## CRITERIA FOR REESTABLISHING ELIGIBILITY

A student who has been dropped from the University for failing to maintain satisfactory progress may re-establish eligibility for College Based, BEOG, and GSL Programs by re-enrolling at the University after the suspension period without benefit of College Based aid and achieving a cumulative grade point average of 2.0 on our four point scale, by achieving good standing status in accordance with University standards, and by complying with all program and institutional regulations. Additionally, a student must:

- submit a BEOG application and/or other need determiner each year.
- submit a financial aid application at least once each year.
- be accepted for enrollment or currently enrolled on at least a half-time basis.
- show evidence of academic or creative promise.
- show financial need.
- be a national or citizen of the United States.
- not owe a refund to a grant program or be in a default on a loan.



# STUDENT PERSONNEL SERVICES

The Student Personnel Services program aims to assist the student in developing the skills, attitudes, understandings, and insights which will assure full expression of his powers as a whole, dynamic person.

The major responsibility for administration of Student Personnel Services resides with the Vice President for Student Affairs and the Council of Student Affairs. The Council is composed of the Directors of Athletics, Financial Aid, Health Services, Student Development Services, Student Activities, Career Counseling, Cooperative Education, Placement, and Personnel Deans.

## LIVING ACCOMMODATIONS ON CAMPUS

The University provides six residence halls on campus, three for men and three for women. These residence halls are designed to provide personal, social and intellectual companionship for the student. Each resident is held responsible for knowing and abiding by the rules and regulations for residence hall living.

All the residence halls are staffed with a Head Resident Counselor and Graduate Resident Assistant who are responsible for the operation of the hall under the supervision of the Student Personnel Deans. Telephone service is available in each of the student rooms.

## ROOM AND BOARD

Students who live in residence halls are expected to take their meals in the University Cafeteria. Charges for room and board are made on a semester basis and are payable at the beginning of each semester. A charge will be made for the replacement of a meal card in the event it is lost, misplaced or stolen during the semester. This charge will be made on a prorated basis for the remaining days of the semester.

## ROOM RESERVATION

A room reservation fee is required to reserve a room in one of the residence halls. This reservation fee is non refundable unless the University is notified in writing at least fourteen (14) calendar days prior to the first official day of registration that the student will not be occupying his or her room. This fee is, however, credited towards the student's room rent at the time of registration. Students who reserve a room and fail to occupy it by the first day of registration for the semester or summer session will forfeit their reservation, unless the Dean of Men or Dean of Women (whichever is appropriate) is notified by the student that he or she will be late occupying the room. Room reservation contracts will be negotiated through the Dean of Men for men and the Dean of Women for women.

Only students who have been admitted to the University may reserve a room in one of the residence halls.

## FOOD SERVICE

The University provides food service for students. Three well-balanced meals are served each day, Mondays through Fridays, and two meals are served on Saturdays. The University Cafeteria, located in the Student Union seats 1000 students. There is a Coffee Shop on the ground floor of the Union and a smaller cafeteria in Wilson Hall used for special occasions.



## RESIDENCE HALLS FOR MEN

**Lena B. Watson Residence Center** for freshman men—a modern six-story, air conditioned structure containing 178 student rooms, an apartment for the Head Resident Counselor, a lounge, a recreation study area, laundry and trunk-storage room.

**Henry Allen Boyd Hall** for sophomore and junior men—a modern six-story air conditioned structure containing 158 student rooms, an apartment for the Head Resident Counselor, a lounge, recreation study area and trunk-storage room.

**Merl R. Eppse Hall** for upperclassmen and graduate students—a six-story, air conditioned structure containing 134 student rooms, an apartment for the Head Resident Counselor, lounge, recreation study area, laundry and trunk-storage room.

## RESIDENCE HALLS FOR WOMEN

**Harriett Hodgkins Hale Hall** is the newest residence hall for women. It houses upperclass and graduate women. It is a six-story air conditioned structure with elevator and telephone services. Each room is semi-private; the building is equipped with lounges, a beauty salon, laundry room, trunk-storage room and an apartment for the Head Resident Counselor.

**Edna Rose Hankal Hall** is the oldest residence hall for women. It houses sophomore women. It is a three-story brick structure, equipped with a formal lounge, trunk-storage room, laundry, and an apartment for the Head Resident Counselor.

**Mary Wilson Hall** is an air conditioned, six-story building that houses 525 freshmen women. This residence hall is equipped with a lounge on the first floor and a public lounge on the first floor. There are laundry rooms on each floor and an apartment for the Head Resident Counselor.



## MAJOR ADVISOR

Upon being admitted to the University, each student is assigned to a faculty member, who serves as a major adviser in the department in which the student plans to pursue a Program of Study. The major advisor will acquaint the student with requirements of the University, the school, and department, and will help the student to make long range plans toward a degree objective.

The responsibility for the selection of courses rests, in the final analysis, upon the student. Similarly, it is the primary duty of the student to pursue courses in their proper order to meet the requirement for graduation. During each semester, the student is urged to confer with the major advisor concerning choices of courses. The student must obtain written approval from the advisor on all courses to be pursued.

In solving specific problems, major advisors assist students by referral to services provided by other appropriate offices.

## STUDENT DEVELOPMENT SERVICES

Student Development Services are designed to help all students grow in self-understanding so that they may use their assets more effectively and plan attainable, meaningful goals for the future. These services are available to each student free-of-charge at both the Main Campus and the Downtown Campus. Units offering services under Student Development consist of The Counseling Center, Upward Bound and Special Services Projects and The Testing Center.

**Counseling Center**—provides orientation activities for new students, counseling services for all students and services for handicapped students.

Orientation Activities for new students are held each semester. Students are required to attend a full orientation program.

Counseling Services are available to each student regarding vocational, educational and personal problems. Professional counselors meet with students on a voluntary basis and students need not be referred by anyone in order to receive counseling. Conversations are kept confidential. Appointments should be made with the receptionist in the Counseling Center.

Counseling Services for Handicapped Students—are designed to assist them in functioning within the university setting and to enable them to participate fully in all TSU academic, cultural, and social activities. This service also functions to identify and aid in the removal of physical barriers that prevent free and open access to university facilities. A Vocational Rehabilitation Counselor is available to provide individualized services in the areas of Orientation, Mobility, Admissions, Registration, Parking, Housing and Campus Activities.

**Special Services**—Upward Bound and Special Services Projects at Tennessee State University are federally funded pre-college and college programs, respectively designed to provide cultural enrichment and developmental services and programs to target population of students; to assist them in developing creative thinking, effective expression, good study habits and positive attitudes toward learning. The projects assist students in developing goals and skills necessary to obtain entrance and to achieve success in post secondary training programs and in institutions of higher learning. Special Services also provide tutorial assistance to students desiring to improve their academic performance.

**Testing Center**—Comprehensive test services are offered to TSU students, staff, and faculty, as well as to the general public. The testing staff administers and scores a wide range of standardized tests related to counseling, advanced placement, undergraduate admissions, graduate admissions, proficiency tests, high school equivalency tests and college credit by examination.

## STUDENT ORGANIZATIONS

Students are encouraged to participate in co-curricular activities that may serve to develop their special talents; deepen their appreciation for fellowship and cooperation, or enlarge their individual capacities for leadership.

Freshmen are cautioned to temper or limit their co-curricular or organizational activity during the first semester because of the demanding academic and social adjustments that have to be made during this period. However, two honor societies—Men's Scholastic and Women's Scholastic—are designed for freshmen who earn a 3.30 or above cumulative average during their first year.

There are 81 University co-curricular organizations, departmental clubs, guilds, fraternities, sororities, honor societies, drama and music groups that are open to all students or students who are majoring in a specific discipline. Of the total co-curricular opportunities available, 18 are national honor societies, 35 are departmental clubs, and 11 have general, cultural, civic, or political focus. Three of the four musical organizations—String Club, University Choir, and Marching Band—are open to all students. Each of the eight Greek letter fraternities and sororities has a pledge group for inculcating its members. One honor society, Alpha Kappa Mu, is open to all students of junior or senior class standing who have earned a cumulative average of 3.30 or above. (See **Student Handbook**).

## INTERCOLLEGIATE ATHLETICS

The University recognizes the need for a well-rounded program of athletics for all students. In this regard, Tennessee State University competes on an intercollegiate basis in football, basketball, baseball, soccer, track, swimming, tennis, and golf. It also provides a varsity program for women's track as well as basketball under the sponsorship of the Tennessee College Women's Sports Federation.

The University is a member of the National Collegiate Athletic Association, Association for Intercollegiate Athletics for Women and the Amateur Athletic Union.

## THE STUDENT HANDBOOK

The **Student Handbook** is a means of facilitating communication among the members of the University. It serves as a source of necessary and useful information which will help the student understand his privileges, rights, and responsibilities pertaining to student affairs. The Handbook contributes to the high level of cooperative and constructive relationships between students and various departments of the University.



## TRAFFIC AND PARKING REGULATIONS

Any student operating a motor vehicle on the campus is required to register this vehicle each school year with the Campus Security Office. The University motor vehicle registration sticker which is issued must be displayed on the left side of the rear bumper.

## OFFICE OF DEVELOPMENT

The development program consists of (1) alumni relations, (2) public relations, (3) development services and (4) research. The purpose of the office is to assist the administration in interpreting the role and mission of the institution to the public and to assist the faculty in securing funds needed for special programs.

## ALUMNI RELATIONS

The Office of Alumni Relations is designed to keep graduates and former students informed of the University's Programs and Activities. The Alumni Relations office also affords an effective channel for the alumni to present useful ideas, offers opportunity to participate in the life of the University, and provides an orderly procedure for alumni to share in improving and promoting the University.

## OFFICE OF PUBLIC RELATIONS

The Public Relations programs have been designed to inform the different publics about programs and activities of the University. A multiplicity of techniques and methods consistent with mass media requirements are used by the staff to communicate with its various publics.

Consistent with the office's institutional responsibility, there are three essential elements which the office performs in dispensing its duties:

- Preparing and disseminating news and feature materials for information and interpretation, to newspapers, magazines, radio and television stations, organizations and other institutions of higher education. At times specific hometown releases are done on faculty, staff and students, and also news is disseminated to designated interest groups.

- Serving as liaison and facilitator for requests from a variety of sources.
- Representing the President as the official spokesman to the media and the various publics.

News about activities, programs and individuals are announced to the public through materials prepared and distributed by the Office of Public Relations.

As publisher, the Office of Public Relations produces and distributes a variety of printed materials.

In the area of photography and graphics, the Office of Public Relations facilitates and handles all official photographic and graphic needs of the University.



## RESEARCH

Research is an essential component of the mission of Tennessee State University, in addition to instruction and service. One of the aims of the University is to encourage faculty and students to engage in research and other scholarly endeavors in the subject matter areas with which the various departments and divisions are concerned.

Specific research emphases are planned in the areas of agriculture, energy, health, environment, and limited resource people.

Organized research at Tennessee State University includes applied, demonstrational and basic research activities and is defined as those research activities carried on by faculty and staff members who have their primary basis of support from outside sponsoring agencies. In order for the organized research program to relate to mission, goals, and long-range plans of the University, the Office of Research, Planning and Development will be responsible for the administration and coordination of these activities.

## HONORS, SCHOLARSHIPS AND AWARDS

The Hazael Edward Welton Scholarship award is given by the Tennessee State University Foundation to outstanding high school graduates on a competitive basis. Students receiving the awards upon graduation from high school may be continued for four years if academic standards are maintained.



## CAREER DEVELOPMENT CENTER

The Career Development Center is a centralized service responsible to assist students and graduates of the University with all phases of their career development, from reaffirming their choice of major and finding a part-time job to planning long range career goals and obtaining full-time employment after graduation.

Graduating Students and Alumni—Graduating seniors and alumni desiring to utilize the services are requested to establish placement credentials consisting of resume and recommendations. These are available to recruiters at the time of the on-campus interview. In addition, a referral service of interested and qualified candidates is available to employers desiring to list employment vacancies with the office.

Student Employment—Each year students are interested in summer seasonal type employment while they are not enrolled at the University. The various types of employment available consist of: regular summer, career related summer and internship type employment. In addition, part-time employment off campus is available while the student is enrolled at the University.



## COOPERATIVE EDUCATION

Cooperative Education in institutions of higher education is that kind of career education that provides an opportunity for full-time students to alternate periods of academic study with periods of off-campus employment. This program is open to majors in all disciplines at the University commencing at the sophomore level.

Cooperative education programs bring business, industry, and government into direct cooperation with students and educators. It provides for the institution of higher education a more effective utilization of its facilities and extends academic resources beyond the campus. It provides for the employer a sound, economical source of skilled manpower. The Cooperative Education Program is administered out of the Career Development Center.

## INTERNATIONAL STUDENT SERVICES

The International Student Services program at Tennessee State University provides technical assistance to all foreign students in connection with their status in the United States and their needed communication with the United States Immigration Service. Also, students are assisted with all official communications to their respective home governments including clearance for foreign currency-exchange. In addition, foreign students may utilize the advisor function of the program to assist them in their cultural assimilation into the life style they experience in the United States and to assist them with other needs they may have peculiar to their status.

## CHILD CARE CENTER

The Child Care Center was established in an effort to provide convenient, dependable and professional child care for students, staff and faculty on the Downtown Campus. The program currently operates during the evening hours, Monday through Thursday. Children three years of age and older are eligible for enrollment.

There is a small charge for each class period a child spends at the center. A sliding fee scale is applied for parents who have more than one child enrolled. Parents are billed the eighth and final weeks of the semester.

Individuals who wish to use the services of the center should make formal application. Staffing and program considerations necessitate that children be enrolled for specific periods of time. Applications are made available during registration each semester.

Parents interested in the service are invited to contact the Office of Student Services, Room 346, Tenth and Charlotte Building.

## EVENING SUPERVISION

Because of the unique role and scope of the Downtown Campus, an evening supervisor is on duty in the Office of Student Services, Room 346, Tenth and Charlotte Building, and at the Information Desk at the 810 Broadway Building at all times during which regularly scheduled classes are in session. The evening supervisor is present to answer inquiries about student services, to handle all emergency situations, and to make operational decisions in the evening for the entire University.

## STUDENT HEALTH SERVICE

The Student Health Service is maintained to safeguard the health of students and of the general University community. The Queen E. Washington Health Service Building is located on the northern section of the campus west of Hankal Hall and

has facilities for complete examination and limited treatment.

No charges will be made for first aid and drugs used in simple treatment.

All cases of illness must be reported to the Head Resident of the Residence or the nurse on duty at the Health Center.

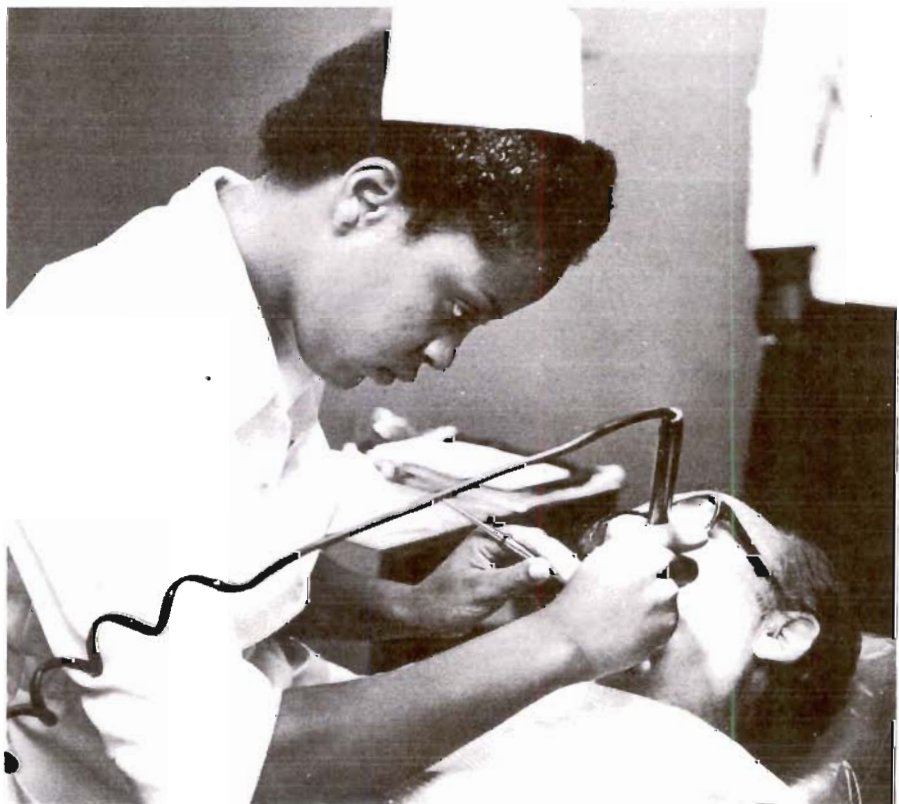
Students suffering from illness requiring hospitalization will be hospitalized at one of the local hospitals at their own expense. The Director of Student Health Service shall immediately notify the parent or guardian and receive permission for such hospitalization.

## CLINIC HOURS

Regular clinic hours for medical aid are from 8:00 a.m. to 8:00 p.m. daily, Monday thru Friday.

During these hours, students requiring health services are examined, advised on health problems and may receive medical care by one of the University Physicians.

Students desiring the services of a physician other than the Health Service physicians must have their parent or guardian write a letter to the Director of Student Health Service making this request. The University accepts no responsibility in such an arrangement. A letter must also be written if the student is a minor.





DEGREE PROGRAMS OFFERED

1981-1983

Schools Majors Offered	Degrees Offered
<b>AGRICULTURE AND HOME ECONOMICS</b>	
Animal Science .....	B.S.
Early Childhood Education .....	A.S., B.S.
Home Economics .....	B.S.
Home Economics Education.....	B.S.
Plant Science.....	B.S.
Rural Development.....	B.S.
<b>ALLIED HEALTH PROFESSIONS</b>	
Dental Hygiene .....	A.S., B.S.
Health Care Administration and Planning .....	A.S., B.S.
Medical Records Administration.....	B.S.
Medical Technology .....	B.S.
Respiratory Therapy .....	B.S.
Speech Pathology & Audiology .....	B.S.
<b>ARTS AND SCIENCES</b>	
Art .....	B.S.
Arts and Sciences .....	A.A., B.A., B.S.
Biology .....	B.A., B.S.
Chemistry .....	B.S., B.A.
Criminal Justice .....	B.S.
English .....	B.A., B.S.
Foreign Language .....	B.A.

History .....	B.A., B.S.
Mathematics .....	B.S., B.A.
Music .....	B.S.
Political Science .....	B.A., B.S.
Physics .....	B.S., B.S.
Social Welfare .....	B.S., B.A.
Sociology .....	B.S., B.A.
Speech Communications and Theatre .....	B.A., B.S.

<b>BUSINESS</b>	
Business Administration.....	B.S.
Business Education .....	B.S.
Office Administration.....	B.S., A.S.
Accounting .....	B.B.A.
Economics and Finance.....	B.B.A.

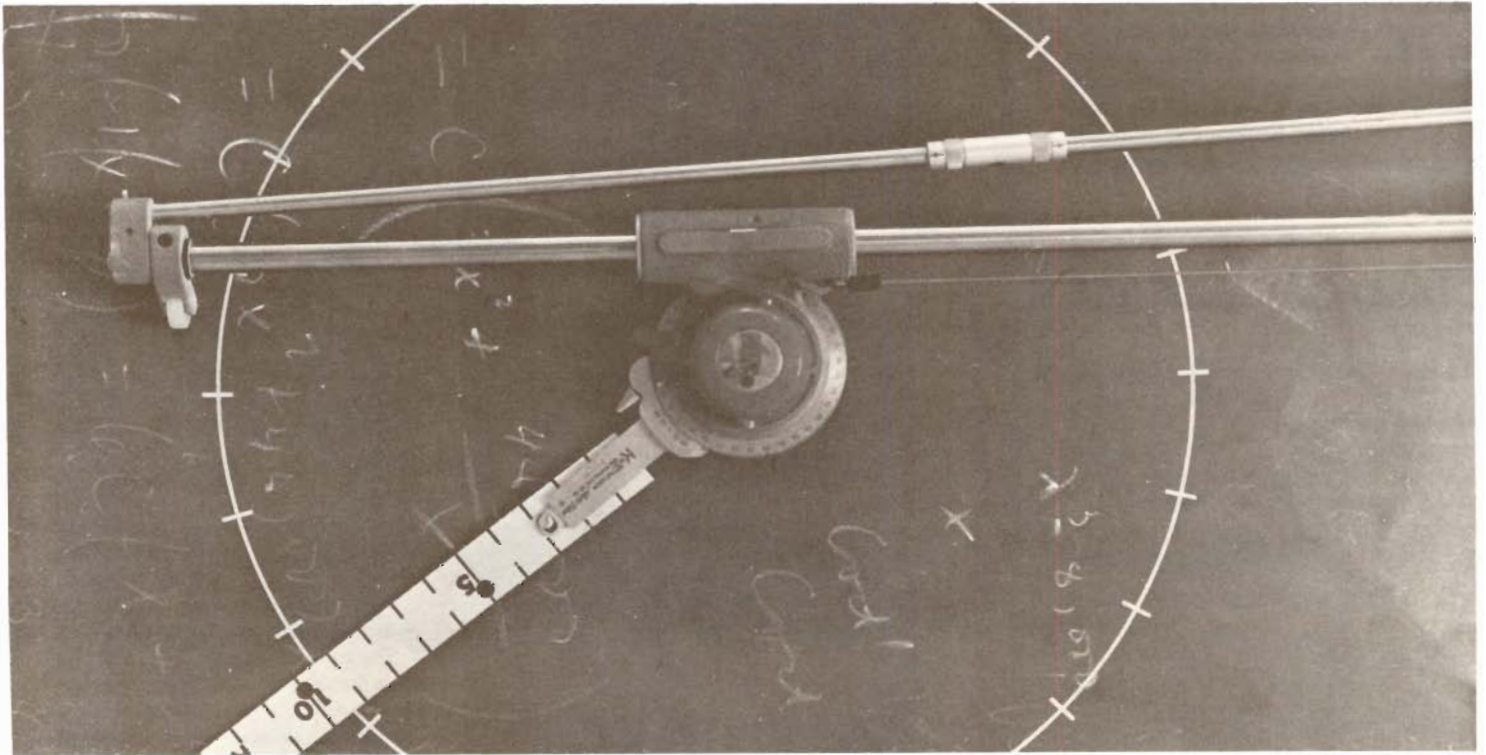
<b>EDUCATION</b>	
Elementary Education .....	B.S.
Health Education.....	B.S.
Health and Physical Education .....	B.S.
Psychology .....	B.A., B.S.
Recreation .....	B.S.
Education .....	B.S.

<b>ENGINEERING AND TECHNOLOGY</b>	
Architectural Engineering.....	B.S.
Civil Engineering.....	B.S.
Electrical Engineering.....	B.S.
Mechanical Engineering.....	B.S.
Engineering.....	B.S.E.
Industrial Technology .....	B.S.
Technical Aeronautics .....	B.S.
Transportation Services and Technology .....	B.S.
Fire Science .....	A.S.

<b>NURSING</b>	
Nursing .....	A.S. B.S.N.

Graduate Degree Programs Offered  
1981-1983

MAJOR	DEGREE OFFERED
Administration and Supervision	M.A.ED., M.ED., E.D.S., ED.D.
Adult Education .....	M.A.ED., M.ED.
Agricultural Sciences .....	M.S.
Biology .....	M.A., M.S.
Business Administration .....	M.B.A.
Business Education	M.A.ED., M.ED., M.B.E.
Chemistry .....	M.S.
Criminal Justice .....	M.C.J.
Curriculum and Instruction .....	ED.S., ED.D.
Elementary Education .....	M.A.ED., M.ED.
Engineering .....	M.E.
English .....	M.A.
Guidance and Counseling .....	M.S., M.ED., M.A.ED., M.ED.
Health and Physical Education	M.A.ED., M.ED.
History .....	M.A., M.S.
Home Economics Education	M.A.ED., M.ED.
Industrial Education .....	M.A.ED., M.ED.
Music Education .....	M.A.ED., M.ED., M.S.
Psychology .....	M.S., M.ED.
Public Administration .....	M.P.A.
Reading .....	M.A.ED., M.ED.
Recreation .....	M.S.
Secondary School Instruction	M.A.ED., M.ED.
Special Education .....	M.A.ED., M.ED.
Speech Communications and Theatre	M.A., M.S.
Educational Psychology and Guidance	ED.D.





# ACADEMIC INFORMATION

## REGISTRATION

Any person who anticipates registering as a Tennessee State University student should be sure that he has met the University requirements for admission. Official enrollment is achieved by properly registering in each course, having photograph made for identification card, and payment of all fees.

Normally, all students register for courses during the days on which registration is scheduled. Detailed instructions are made available by the Dean of Admissions and Records as to time, places, and procedure for registration.

A late registration period is provided for those who are unable to register during the regular registration days. However, students who register late are required to pay a late registration fee, and often find it difficult to secure a satisfactory schedule of classes. The late registration fee is \$10. No student may late register for (or add) a course which has met for the equivalent of 150 minutes. If a student does late register for (or add) a course, he will be responsible for all material covered from the first class meeting, and must at the discretion of the instructor, be responsible for any make-up work or tests.

## CROSS-TOWN ENROLLMENT IN THE AIR FORCE RESERVE OFFICERS TRAINING CORPS

Educational Institutions within Nashville and the surrounding area having a Cross-town Agreement with Tennessee State University may allow their students to enroll in the university's AFROTC Program. These students are eligible to receive all benefits, privileges, and scholarships as fully enrolled TSU students. At present, Vanderbilt University, Middle Tennessee State University, Fisk University, David Lipscomb College, Trevecca Nazarene College, and Aquinas Junior College have such agreements with the University.

## CORRESPONDENCE

Correspondence credit will be accepted only if earned at public institutions of higher education in the State of Tennessee.

## SPECIAL STUDENTS

A special undergraduate student is not a candidate for a degree. However, this classification allows one to register for an undergraduate course or courses, to obtain a grade, and to have this grade recorded on one's student records. This category of admission is not available to students who are not currently in good standing at the last college attended.

Admission as a special undergraduate student does not guarantee enrollment in any course. After having been admitted, the student is subject to normal procedures for registering for courses. Applications for this category should be filed at least 15 days prior to the beginning of the semester in which the student desires to enroll. All fees are the same as for regular students.

Special undergraduate students are subject to the following provisions:

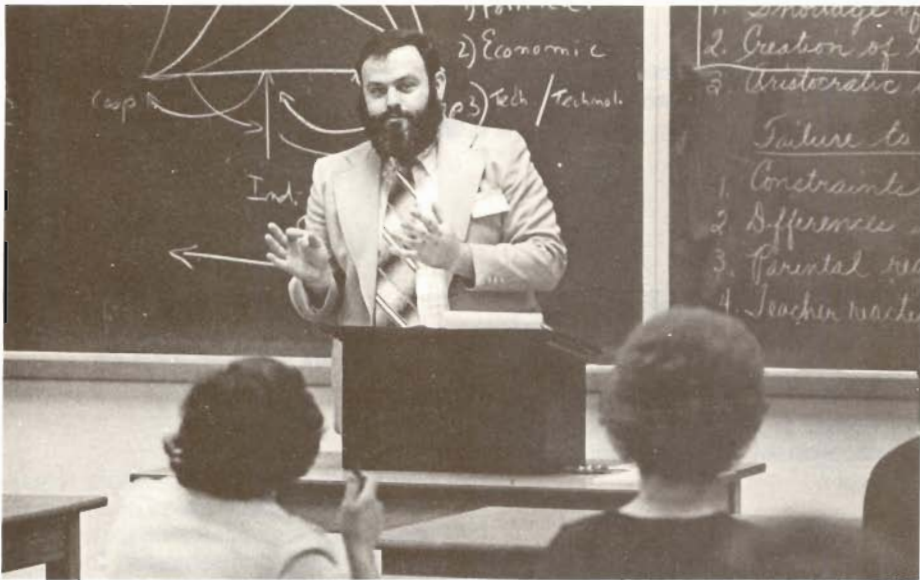
1. A special student must have completed any prerequisite courses
2. To subsequently apply for admission as a candidate for a degree, a special undergraduate student must meet admission requirements for transfer students and must satisfy the requirements of the degree program. A student may not apply more than 60 hours earned as a special undergraduate student towards the requirements for a bachelor's degree.

## TRANSIENT STUDENTS

A transient student is one who is regularly enrolled in another college or university and who desires admission for a limited period, usually one semester. The transient student is required to submit a regular application for admission and to furnish a letter of good standing from the college or university in which he/she is enrolled. The transient student who wishes to become a regular student must file an appropriate application and meet the same requirements for admission as a transfer student.

Credits earned by students who are Tennessee residents attending public colleges and universities in Tennessee will be accepted toward degree programs on the same basis as work taken on the campus of Tennessee State University. All other students seeking advanced standing will be admitted to Tennessee State University provided they meet the minimum requirement of a 2.00 grade point average. The University does not grant upper division credit (300-400 level courses) for lower division work transferred from community or junior colleges. In addition, no upper division credit will be granted for any lower division credit transferred from any other accredited university or college; any exceptions to this particular provision must be approved by the Office of Admissions and Records and the appropriate department head. The Office of Admissions and Records will provide all transfer students an equivalency evaluation of all transfer credit during the student's first semester of enrollment at the University. Specific questions regarding transfer credit should be addressed to the Office of Admissions and Records and the appropriate department head. The Office of Admissions and Records, Transfer Analyst Unit, located in Room 259 of the Downtown Campus, telephone (615) 251-1161.





## GRADING SYSTEM

Grades	Quality Points Per Semester Hour	Description
"A" or "H"	4.0	Excellent, work of exceptional quality which indicates the highest level of attainment in a course.
"B" or "P"	3.0	Good, work above average which indicates a high level of achievement.
"C"	2.0	Work of average quality representing substantial fulfillment of the minimum essentials of a course.
"D"	1.0	Poor, representing passing work but below the standards of graduation quality.
"EP"	0.0	Represents the successful completion of examination for credit with an equivalent grade of "C" or better.
"EF"	0.0	Represents the failure to produce work of at least "C" quality of an examination of credit.
"F"	0.0	Failure, representing unacceptable performance in a credit course.
"I"	0.0	Represents incomplete work of passing quality and is given when the student has missed an examination or some small part of the required course work.
"NC"	0.0	Recorded by the Office of Admissions and Records when the "I" grade is not removed within one (1) calendar year.

\*"H" and "P" are used only in Colloquia courses in the Honor's Program

"NG"	0.0	Given only to Special Services students for unsatisfactory performance in a level credit course.
"S"	0.0	Represents satisfactory performance in a non-credit course.
"U"	0.0	Given for unsatisfactory performance in a non-credit course.
"W"	0.0	Represents official withdrawal from a course or the University.
"X" (Audit)	0.0	Given by a faculty member only in instances when the student has registered and attended a course for audit rather than for credit.

For each course in which a student is enrolled, a specific letter grade must be awarded.

## REGULATIONS REGARDING GRADES OF "I", "D", and "F"

Removal of "I" grades: "Incomplete" is a temporary grade which must be removed from the undergraduate student's permanent record within one calendar year from the end of the term in which the "I" grade was awarded. If all requirements of a course in which the "I" was awarded are not met within two consecutive terms, the grade of "I" will be changed to "NC" (no credit) by the Office of Admissions and Records.

No student will be allowed to accumulate more than 15 credit hours with the grade of "NC." For all succeeding courses for which the grade of "I" is awarded and not removed, the grade will be converted to "F" by the Office of Admissions and Records. The student is responsible for initiating all necessary steps to remove the deficiency grade:

1. Inquire in the Office of Admissions and Records regarding the course in which the grade of "I" has been awarded.
2. Pay to the Bursar's Office the fee of \$5.00 (applicable only to undergraduate courses).
3. Secure from the Office of Admissions and Records the replacement grade card.
4. Take the replacement grade card to the teacher of the course which the "I" was earned.
5. The replacement grade must be filed in the Office of Admissions and Records in person by the teacher of the course after it has been properly completed (name, of student, grade awarded, credit hours which the course carries, title of the course, major advisor's signature, and the instructor's signature).

## REPEAT GRADES

Repeating of Courses: After consultation with the major advisor, the student may repeat courses regardless of prior grades awarded. The last grade awarded in the courses repeated supersedes all grades and will be counted in the semester in which the course is repeated. Courses may not be repeated more than twice (three attempts) unless the grade in the third and subsequent attempts is used in calculating the quality point average.

To receive educational assistance benefits, a veteran may not repeat courses unless as specified in the Veterans Administration regulations.



## EXAMINATIONS

**Late Final Examinations:** Students are expected to take all examinations according to the schedule except in very unusual circumstances, such as incapacitating ill health. If a student does absent himself from final examination without having first secured the written permission of his school dean, he must confer as soon thereafter as possible with his school dean concerning the reasons for having missed the examination(s). If after conferring with the teacher of the course, the Dean is satisfied that unusual, justifying circumstances obtained, the student is given permission to take a late examination.

## EXAMINATION FOR CREDIT

Ordinarily, credit may not be obtained except by pursuing a course in the regular manner. Examinations for course credit are permitted only in cases when there is substantial evidence that the student has already covered the content of the course. The competencies, skills and/or information may have been acquired, for example, through a similar course taken at another school for which credit has not been accepted by Tennessee State University; through job experiences; or other activities. The examination must be of comparable difficulty and scope to the regular examination for the course. Such an examination can only be taken once for each course.

Credit for examination may be attained for:

- research or independent study courses.
- any course work from which the student has been exempted by placement examination or which was accepted for admission purposes.

Special forms for such examinations may be secured from the Office of Admissions and Records. If the request is denied by the Department Head and/or Departmental Review Committee in whose area the course is offered, the Department Head retains the form and forwards copies to the student's major advisor and Department Head. If the request is approved, the

Department Head signs the form which the student then presents to the Business Office with a payment of \$15.00, the required fee for each such examination. The student submits the form and receipt to the teacher designated to administer the examination.

The teacher who gives the examination submits a copy of the examination and the form with the results recorded on it to the Department Head. The remaining copies of the form are distributed by the teacher as follows: one to the Office of Admissions and Records; one to the student's major advisor; and one to the student's Department Head.

Upon successfully completing the examination with an equivalent grade of "C" or better, "EP" will be recorded on the student's transcript. Otherwise "EF" will be reported and recorded. Neither "EP" nor "EF" will be used in computing the grade point average.

A maximum of forty-four semester hours may be earned through credit by examination.

**Credit By Examination:** A Student may earn semester hours of credit in certain introductory departmental courses, through tests offered in the College-Level Examination Program (CLEP). Information about the tests and permission to take them can be obtained from the University Testing Center.

## ACADEMIC STANDARDS

### RETENTION STANDARDS AND ACADEMIC PROBATION

The minimum grade point average required by the University for awarding the baccalaureate or associate degree is 2.00 for all credit work taken by the student as part of an approved program of study. The GPA is computed by dividing the total number of hours attempted into the total number of quality points earned (see Grading System) except for credit hours in courses for which the student received a "W" (see Adjusting Class Loads). Also, a repeated course is counted as attempted one time only. Any enrolled student who meets the minimum academic requirements is in good academic standing at the University.

Probationary status will be incurred by a student who in any term fails to meet the standards listed below:

- 0-14 hours attempted—No minimum GPA
- 15-29 hours attempted—Not less than a 1.4 cumulative average
- 30-50 hours attempted—Not less than a 1.7 cumulative average
- 51-67 hours attempted—Not less than a 1.9 cumulative average
- above 67 hours attempted—Not less than a 2.0 cumulative average

At the end of the next term\* of enrollment, a student on academic probation who has failed to attain either the above cumulative standard or a 2.0 GPA for that term will be suspended for a minimum of one term. The summer term may not be counted as the term of suspension. A suspended student may apply for readmission. If readmitted, the student enters the University with probationary status. Another suspension at the end of the term of readmission may be avoided by achieving the minimum cumulative average according to the above standards. Moreover, a student on academic probation will not be suspended at the end of any term during which a term average of 2.00 has been earned.

A student who believes that extenuating circumstances contributed to his/her suspension may appeal the case to the University's Review Committee on Suspension and Readmission. To appeal, the student must explain those circumstances in a letter submitted to the Office of Admissions and Records immediately after receiving notification of suspension.

\*NOTE: A term is defined as one semester or one summer (I and II).





## REGISTRATION PROCEDURES

Detailed procedures for registration are given each semester as a part of the schedule of classes.

The following must be observed prior to registration to avoid delay:

1. Freshmen and transfers must be accepted for admission prior to registration.
2. All students are expected to register at their scheduled time for registration. No one will be allowed to register earlier than his scheduled time. Each student must observe registration procedures as specified at that time. A student is not officially enrolled until he has completed all of the requirements of registration including the payment of fees. Registration after the regular registration dates may be completed by presenting an acceptable reason for the delay and by the payment of a late registration fee.
3. Former students must settle all prior accounts in the Business Office before re-enrolling.

The following must be observed during the registration period:

1. All freshmen must complete the testing program.
2. All students must have a conference with a faculty advisor to arrange an approved schedule of classes.
3. All students must secure admission to the classes desired.
4. All students must pay fees in full on the day they register. Students who have not paid their appropriate fees on the day they register may, at the discretion of the University, be automatically withdrawn from the University. Students will not be enrolled officially until their fees are paid.
5. Upon completion of payment of all fees, freshmen and transfer students must have I.D. picture made and validated, and register automobiles. All others must have their I.D. validated and register automobiles.

## SECOND BACHELOR'S DEGREE

A student who holds a bachelor's degree may receive a second bachelor's degree from the University by satisfying the following requirements.

1. Meet all requirements for both degrees.
2. Complete at least thirty semester hours beyond the first bachelor's degree.
3. Attend the University for at least two semesters beyond the minimum time required for the first bachelor's degree.

## GRADUATE CREDIT

Students who are classified as seniors and enrolled in the last semester of the senior year may be allowed to take a maximum of six graduate semester hours upon approval by the Dean of the Graduate School.

## ENGLISH PROFICIENCY EXAMINATION:

During the second semester of the freshman year, all students must take an examination to determine their proficiency in English.

Those students who do not demonstrate satisfactory performance on the test will be required to enroll in English 201, Advanced Composition, and to earn a minimum grade of "C" in this course. Former UTN students who had reached junior/senior standing by the time of merger (July 1, 1979) are exempted from this requirement.

## CLASSIFICATION OF STUDENTS

All students of the University must be classified in one of the following categories:

**Freshmen:** Those who have completed less than 30 semester hours.

**Sophomores:** Those who have completed 30 or more semester hours but less than 60 semester hours.

**Juniors:** Those who have completed 60 or more semester hours but less than 90 semester hours.

**Seniors:** Those who have completed 90 semester hours or more.

**Specials:** (a) Those who meet entrance requirements and who wish to pursue particular studies but not to qualify for a bachelor's degree. Such students may be admitted with the permission of the Dean of Admissions and Records. (b) Those who are twenty-one years of age and who have not completed four years of high school work may enroll in such courses as they are prepared to take up to a maximum of 60 semester hours.

## POLICY CONCERNING STUDENT ACCESS TO EDUCATION RECORDS

### DEFINITIONS

**Education Records.** EDUCATION RECORDS are defined as those records, files, documents, and other materials which (1) contain information directly related to a student; and (2) are maintained by Tennessee State University or by a person acting for the University. "Records" means information recorded in any medium, including, but not limited to the following: handwriting, print, tapes, film, microfilm, and microfiche. EDUCATION RECORDS do not include (1) personal notes, (2) records available only to law enforcement personnel, (3) employment records, (4) medical and psychiatric records (these are accessible by the student's physician).

**Student.** A student is any person who is or has been enrolled at Tennessee State University. An applicant who does not enroll or who is declared ineligible has no inherent right to inspect his file. Wherever "student" is used in reference to personal rights, an eligible parent of a dependent student has similar rights. This "eligible" parent is one who has satisfied Section 52 of the Internal Revenue Code of 1954, and who presents such proof to the custodian of the EDUCATION RECORDS. Normally this proof will be written affirmation by the student and the parent declaring that the student is a dependent for Federal Income Tax purposes.

**Directory Information.** Directory information is defined as: "the student's name, address, telephone listing, date and place of birth, major field of study, participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance, degrees and awards received, and the most recent previous educational agency or institution attended by the student." At the time a student registers for courses, the student may notify the Office of Admissions and Records (this must be done in writing) that directory information for that student may not be released. This notification is effective only for the one semester.



ter for which the student is then registering.

**Access.** To have access to an EDUCATION RECORD is to be allowed to see the original record. This implies the right to obtain copies of that record.

**Release of Personally Identifiable Student EDUCATION RECORDS.** Tennessee State University shall not permit access to, or the release of, any information in the EDUCATION RECORDS of any student that is personally identifiable, other than Directory Information, without the written consent of the student, to any other than the following:

1. TSU officials and staff who have legitimate educational interest;
2. Officials of other schools in which the student seeks admission;
3. Appropriate persons in connection with a student's application for, or receipt of, financial aid;
4. Federal or State officials as defined in paragraph 99.37 of the regulations concerning this law;
5. State and local officials authorized by State statute;
6. Organizations conducting studies for, or on the behalf of, TSU for the purpose of assisting in accomplishing the University's stated goals, when such information will be used only by such organizations and subsequently destroyed when no longer needed for the intended purpose;
7. Accrediting organizations to carry out their functions;
8. Parents of a dependent student as defined in section 152 of the Internal Revenue Code of 1954 (Written consent may be allowed from either of these separated or divorced parents subject to any agreement between the parents or court order. In the case of a student whose legal guardian is an institution, a party independent of the institution, appointed under State and local law to give parental consent, may be allowed to do so.);
9. In compliance with judicial order or subpoena, provided that the student is notified in advance of the compliance; or
10. Appropriate persons in connection with an emergency if such knowledge is necessary to protect the health or safety of a student or other persons.

**NOTE:** With the exception of TSU officials and staff, who have been determined by the University to have legitimate educational interest, all individuals and agencies who have requested or obtained access to a student's record will be noted in a record which is kept with each student's EDUCATION RECORD. A request must be in writing stating the purpose of the request. This record will also indicate specifically the legitimate interest that the persons or agency had in obtaining the information.

## PROCEDURES FOR ACCESSING EDUCATION RECORDS

The student requests the custodian to allow him to inspect the EDUCATION RECORD. The student may ask for an explanation and/or a copy of the EDUCATION RECORD. (The price of copies shall not exceed the cost of duplicating the record.) After consultation with the custodian, errors may be corrected at that time by the custodian. If there is a disagreement between the student and the custodian as to the correctness of the data contained in the record, the student, after exhausting reasonable means of reconciliation with the custodian, may submit a request for a formal hearing. The request, and the formal challenge to the content of the records, must be presented in writing to the chairman of the University Appeals Committee. The chairman shall call a meeting of the committee or place this matter on the agenda for a scheduled meeting no later than forty-five days after receipt of the written appeal and challenge. The committee will allow the student to present evidence to substantiate his appeal and shall render a written decision to the student within forty-five days after the meeting. Note: This procedure does not provide for a hearing to contest an academic grade.

## RIGHT OF ACCESS DOES NOT INCLUDE

1. Financial records of parents or any information therein;
2. Confidential letters and statements of recommendation which were placed in the EDUCATION RECORDS of a student prior to January 1, 1975;
3. Records to which access has been waived by a student. (This applies only if a student, upon request, is notified of the names of all persons making confidential recommendations and if such recommendations are used solely for the purpose they were intended.)

## DESTRUCTION OF EDUCATION RECORDS

Education records may be destroyed except that a student shall be granted access prior to the destruction if such is requested.

## INFORMING STUDENTS

TSU shall inform its students of its policy governing "Privacy Rights of Students' Education Records" by publishing the policy in the University Bulletins annually.

## HONORS

### Dean's List

To be eligible for the Dean's List a student must have (1) a minimum cumulative grade-point average of 2.00 (C); (2) must have achieved a grade-point average of not less than 3.00 (B) for a given semester; and (3) he must have carried not less than 12 semester hours of work during the semester.

The Dean's List will be published following the close of the semester.

## DEGREES WITH HONORS

The degree of Bachelor of Science or Bachelor of Arts with honors is awarded with distinction or with high distinction. To be graduated with distinction, the student must earn an average of at least 3.25. To be graduated with high distinction, the student's average must be not less than 3.50.

Students who have participated in the Honors Program will, upon achieving an average of at least 3.25 and meeting other requirements of the Program, be graduated with UNIVERSITY HONORS.

To be eligible for honors, a student must have been in residence for not less than three semesters, and he must qualify as a suitable representative of Tennessee State University.

Candidates for honors must qualify one semester prior to graduation.



# UNIVERSITY REQUIREMENTS FOR A BACHELOR'S DEGREE

A bachelor's degree is conferred on a student who satisfactorily completes a curriculum in one of the departments. The candidate for a bachelor's degree must satisfactorily complete each of the general requirements of the University as listed below.

1. The minimum University requirement for a bachelor's degree is 132 semester hours with a minimum cumulative average of "C" (2.00).
2. A minimum of 60 semester hours must be completed at the 300 and 400 level of courses.
3. A minimum of 24 semester hours must be offered for a major with a minimum of 10 hours on the 300 and 400 level.
4. A minimum of 18 semester hours is required for a minor.
5. Four semesters of required activity courses in Physical Education (P.E. 11-23, or P.E. 91-94, or AFROTC 100-200 level) or marching band.\*
6. A transfer student must spend at least one academic year in residence at the University and earn while in residence not less than 30 semester hours of credit with a minimum average of "C" (2.00).

\*These courses must be completed satisfactorily during freshman and sophomore years. For students below age 25 at the time of initial enrollment, completion of four credits in health or related areas may be established as an alternate means of fulfilling the TSU requirement of four credits in physical education. For students age 25 or older at the time of initial enrollment, the four credits in physical education will be removed from the list of degree requirements. Thus, the minimum credits required for a baccalaureate degree for this latter group of students are 128 semester hours.

Veterans may elect to obtain credit for the physical education activity courses on the basis of their military training. Two semester hours may be credited as "Individually Adapted Physical Education" for each of the first two years of military service. To obtain this credit the veteran must apply in the Office of Admissions and Records.

7. Twelve semester hours in English (must include Eng. 101-102).
8. Four semester hours in Mathematics.

9. Nine semester hours of social science, including six semester hours of American History. Students who do not present a year of American History on their high school transcripts are required by Tennessee Law to meet this requirement during the freshman year.
10. Four semester hours in humanities (Art, Foreign Language, Drama, Speech, Music, Philosophy)—courses from two fields.
11. Six semester hours in natural sciences (biological sciences or physical sciences).
12. English Proficiency demonstrated by test score or performance in English 201 (Problems in Composition). The English Proficiency Examination is administered to all freshmen at the end of the second semester. The proficiency requirement should be met by the end of the sophomore year. Juniors and seniors (except transfer students) who have not met the requirements must do so by enrolling in and successfully passing English 201. Transfer students who have not met a comparable proficiency requirement elsewhere must take the proficiency during the first semester of residence at this institution.
13. A Senior Project.
14. Candidates for the bachelor's degree must earn in residence a minimum of 24 of the last 30 semester hours offered for the degree.

## GENERAL EDUCATION CORE FOR THE BACHELOR OF ARTS DEGREE

English 101, 102	6 semester hours
Literature (Any Eng 211 and 212)	6 semester hours
Foreign Language (1-6 semesters)	6-12 semester hours
Social Sciences (must include 6 sem. hrs. of American History)	9 semester hours
Natural Science	6 semester hours
Mathematics	4 semester hours
Philosophy, Music, Art, Drama or Speech (combination of any two fields)	4 semester hours
Physical Education Activity courses*	4 semester hours

\*For students below age 25 at the time of initial enrollment, completion of four credits in health or related areas may be established as an alternate means of fulfilling the TSU requirement of four credits in physical education. For students age 25 or older at the time of initial enrollment, the four credits in physical education should be removed from the list of degree requirements. Thus, the minimum credits

required for a baccalaureate degree for this latter group of students would be 128 semester hours.

## MODERN FOREIGN LANGUAGE REQUIREMENT FOR THE BACHELOR OF ARTS DEGREE

The foreign language (French, German, or Spanish) requirement may be satisfied as follows:

- a. Students who represent no (0) units of a foreign language in high school when they enter the University are to take four (4) semesters of work in one foreign language, beginning with the freshman course in that language.
- b. Students who present two (2) units of a foreign language in high school and who desire to continue to work in the same language may satisfy the language requirement by pursuing two (2) semesters in that language, beginning with the sophomore course of that language.

## PROFICIENCY TEST IN FRENCH, GERMAN, SPANISH

Students who enter the University for the first time and who present two or more high school units in a foreign language may take a proficiency test in that language. A student's proficiency in a given language may alter the number of semester hours required to satisfy the language requirements.

## GENERAL EDUCATION CORE FOR THE BACHELOR OF SCIENCE DEGREE

English 101, 102	6 semester hours
Literature (any Eng 211 and 212)	6 semester hours
Social Sciences (must include 6 sem. hrs. of American History)	9 semester hours
Natural Sciences	8 semester hours
Mathematics	4 semester hours
Philosophy, Music, Art, Drama or Speech (combination of any two fields)	4 semester hours
Physical Education Activity Courses*	4 semester hours

\*Subject to approved exceptions and exemptions.

## GENERAL INFORMATION ON THE TEACHER EDUCATION PROGRAM

An organizational unit with the title, Council on Teacher Education, is the coordinating body for the teacher education program. Its principal objectives are:

1. To help provide and perpetuate an institutional climate favorable to healthy growth of a teacher education program.
2. To develop and administer teacher educa-



tion politics which will offer reasonable assurance that only persons of professional promise are prepared and recommended for entry into the teaching profession.

The Council develops policies and ways for implementing them relating to admission, retention, counseling, records, curricula, and standards for completion of a program in teacher education, and recommends the policies and ways for implementing them to the Vice President for Academic Affairs and the President of the University.

The Council is composed of the following members:

- 1. Dean of the School of Education, Chairperson
- 2. Dean of the Graduate School (Ex-Officio)
- 3. One member elected by the School of Agriculture and Home Economics (two years; may be re-elected)
- 4. One member elected by the School of Engineering and Technology (two years; may be re-elected)
- 5. Three members elected by the School of Arts and Sciences (two years; may be re-elected)
- 6. Three members elected by the School of Education (two years; may be reelected; two undergraduate faculty members, one graduate faculty member)
- 7. One member elected by the School of Business (two years; may be re-elected)
- 8. Director of Pre-Service Field Experience (Ex-Officio)
- 9. Two practitioners (principal and teacher two years)
- 10. Two students (one each graduate and undergraduate, one year).

The office of the Director of Teacher Education approves all students who apply for candidacy to the teacher education program and secures a record of each applicant showing that the applicant has met standards for candidacy to teacher education as required by the policies of the Council. The Director of Teacher Education informs the departmental representative for each teacher education curriculum concerning the students approved for the teacher education program.

The departmental teacher education representatives inform the Director of Teacher Education through their respective Deans of any students in their departments who are not maintaining the teacher education program's retention standards. He will notify the students who are not meeting the retention requirements that they have one semester in which to remove the deficiencies. Students who do not remove their deficiencies and meet the retention standards during the semester of probation are subject to be dropped from the teacher program.

TEACHER EDUCATION  
ADMISSION AND  
RETENTION REQUIREMENTS

ADMISSION

- 1. Each student who desires to be a candidate for admission to the Teacher Education Program will make application to the Director of Teacher Education in the second

semester of the sophomore year, after he has completed 53 semester hours of course work, including the courses, Education 201—Foundations of Education, and Psychology 242—Human Growth and Learning.

- 2. The application should include reports showing that the student:
    - (a) has made scores on the appropriate California Achievement Tests, Level 19 (Form C or D) at or above the minimum level required by the State Board of Education for admission to a Teacher Education program.
- NOTE: Students who do not make satisfactory scores on the California Achievement Tests (CAT) may take the test(s) a second time, but if they fail to make satisfactory scores the second time, there is no provision for further opportunities to retake the test(s).
- (b) has made the score on the English tests at or above the minimum level required for admission to the Teacher Education Program or after failing the test two (2) times has passed the designated course with a grade of B or better.
  - (c) has passed departmental tests in oral and written expression.
  - (d) has a 2.00 cumulative average on a 4 point scale.
  - (e) has good character references.

Candidates who are approved for admission to Teacher Education and students who do not have a permanent or provisional certificate will not be permitted to enroll in the following courses without special permission from the Director of Teacher Education: Education 301, 387, 491, Psychology 312, and all methods courses.

RETENTION

To remain in the Teacher Education Program the student must:

- 1. Maintain the University scholarship standards.
- 2. Apply for student teaching through the teacher education curricula heads to the Director of Pre-Service Field Experiences in the first semester of the senior year (minimum of 85 semester hours). The applications should include documentation that the student has:
  - Met Teacher Education requirements to date.
  - Completed the prescribed prerequisite professional education courses and ¼ of the prescribed courses in his/her major area of specialization with a grade of "C" or better in all methods courses. Maintained a minimum grade point average of 2.5 in the designated courses in the major area of specialization with a minimum grade of "C" in all methods courses.
  - Passed a physical examination showing that he is free of communicable diseases.
- 3. All students are required to carry a maximum of 15 semester hours, six (6) in method courses, and nine (9) in student teaching during the semester in which they do student teaching. The student must earn a grade point average of 2.00 or better.

NOTE: Students who are awarded a grade of D in student teaching may graduate from the University but will not be recommended for certification.

ALTERNATIVES TO THE  
EXAMINATION REQUIREMENTS  
FOR THE TEACHER EDUCATION  
PROGRAM

Students who fail the English test, after taking the test (2) times, may enroll in the following course to meet the examination requirement for the Teacher Education Program.

**English 201. PROBLEMS IN COMPOSITION (3 hrs.)** The student will study material that will help the student to develop mastery of the skills needed to overcome his specific problems in written expression.

STUDENTS MUST MAKE A PASSING GRADE OF "B" OF MORE.

REQUIREMENTS FOR THE  
BACHELOR OF SCIENCE DEGREE  
IN TEACHER EDUCATION  
PROGRAM

Minimum Semester Hours	
General Education Core	
At Least 1/3 of the curriculum must consist of general liberal studies.	
Communication.....	6
English 101-102	
Humanities .....	10
Literature (5 sem. hrs.)	
Art, Music, Drama, Speech, Philosophy (4 sem. hrs.)	
Social Studies.....	9
History 201-202 (6 sem. hrs.)	
Geography, Economics	
Sociology, Political Science	
or Anthropology (3 sem. hrs.)	
Natural Sciences and Mathematics.....	10
Biological Science, Physical	
Science, or a combination of	
these, (6 sem. hrs.)	
Mathematics (4 sem. hrs.)	
Health, Physical Education,	
Personal .....	6-7
Education, and Home and Family Living	
Physical Education activity	
courses (4 sem. hrs.)	
Health, Personal Development or	
Home and Family Living (2-3 sem. hrs.)	

PROFESSIONAL EDUCATION CORE

A. Elementary Majors		Semester Hours
EDCI 201	History and Foundations of Education	3
EDCI 301	School Organization, Management and Community Relations	3
EDCI 321	Methods and Materials in Mathematics	3
EDCI 387	Curriculum	3
Development		3
EDSE 465	Introduction to Special Education	3
Psychology 242	Human Growth and Learning	3



Psychology 312	Measurement, Evaluation and Guidance for Classroom Teachers	3
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SEMESTER BLOCK

First Half		
EDCI 322	Methods and Materials in Language Arts and Social Studies	3
EDRD 324	Teaching of Reading in the Elementary School	3
ECDI-O 472	O Student Teaching Orientation	0
Second Half		
Education 472	Directed Teaching	9
TOTAL		36

B. Secondary Majors

Education		
EDCI 201	History and Foundations of Education	3
EDCI 301	School Organization, Management and Community Relations	3
EDCI 387	Curriculum Development	3
EDSE 465	Introduction to Special Education	3
Psychology 242	Human Growth and Learning	
Psychology 312	Measurement, Evaluation and Guidance for Classroom Teachers	3

SEMESTER BLOCK

First Half		
Education 371	Methods and Materials in Secondary Education	3
EDRD 491	Reading and Study in the Secondary School	3
EDCI 472	O—Student Teaching Orientation	0
Second Half		
EDCI 472	Directed Teaching	9
TOTAL		30

ARMY or NAVAL ROTC  
SCHOLARSHIPS

are available to Tennessee State University students in the respective ROTC programs administered through Vanderbilt University. Information on application for these scholarships can be obtained from the Tennessee State University Office of Veterans Affairs.

INFORMATION FOR  
VETERANS, IN  
SERVICE  
PERSONNEL,  
DEPENDENT  
CHILDREN  
AND WAR  
ORPHANS

A veteran who has served continuously on active duty for a period of at least 181 days, any part of which was after January 31, 1955 and who was discharged or released under conditions other than dishonorable, is eligible for training under the Veterans Readjustment Act of 1966. The sons and daughters of deceased veterans and the sons and daughters of living veterans who have disabilities which are considered to be total and permanent in nature are eligible for training under the War Orphans Educational Act. Applications for benefits under these Acts may be secured from the Veterans Administration Office nearest the applicant.

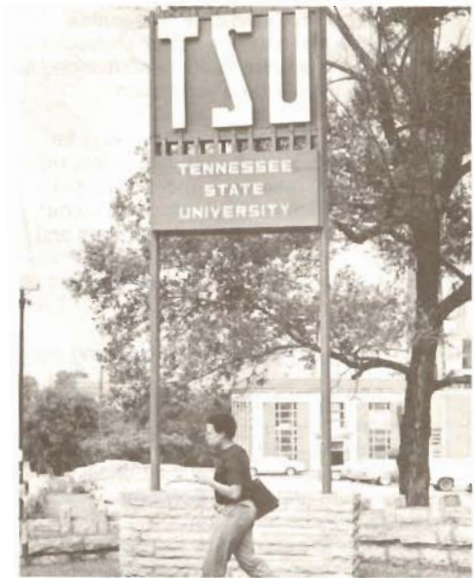
CLASS LOAD FOR  
VETERANS

All students who expect to receive educational allowance checks must observe the following class load schedule on the undergraduate level:

- Full-time for 12 hours or more
- ¾ time for 9-11 hours
- ½ time for 6-8 hours
- None for less than ½ time (War Orphans only)

Veterans' training, conduct and progress must at all times, both on and off the campus, be maintained in a satisfactory manner, conforming to the ideals of the University. For further information write to:

Office of Veterans Affairs  
Tennessee State University  
Nashville, TN 37203

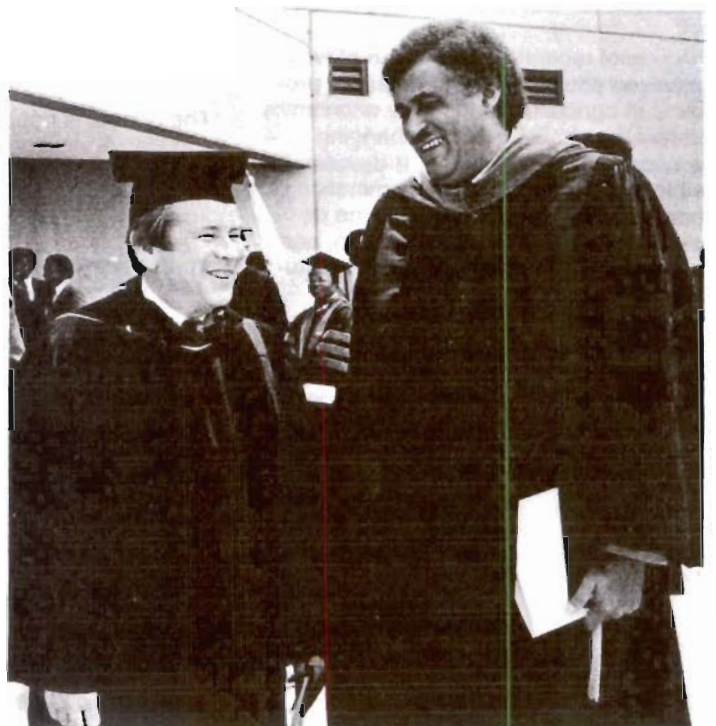




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# ACADEMICS

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# THE SCHOOL OF AGRICULTURE AND HOME ECONOMICS

**Roland Norman, Ph.D., Dean**

## GENERAL STATEMENT

The School of Agriculture and Home Economics is one of the Seven schools of Tennessee State University which is a full fledged land-grant institution situated in Nashville, Tennessee. The School therefore seeks to carry out the University's mandates of instruction, research and public service. Instruction is achieved through four academic departments, Animal Science, Home Economics, Plant Science and Rural Development. Research is federally funded and is administered through the Cooperative Agricultural Research Program (CARP). Public service is carried out by the Cooperative Extension Service which works in collaboration with the University of Tennessee Extension Service.

The school recognizes the value of well organized educational and research programs in agriculture and home economics to meet the challenges of a changing American society. As such, it devotes itself to the discovery and dissemination of knowledge which is essential to the development, conservation, allocation, and use of human resources as well as natural resources. The programs of study through the school are geared toward providing high quality training to students in their chosen areas of concentration and preparing them for various career opportunities or for further studies leading to advanced degrees.

## THE GOALS OF THE SCHOOL

1. To maintain a high standard of instruction in agriculture and home economics.
2. To encourage faculty and students to engage in research which advances knowledge in the areas with the various academic departments are concerned.
3. To continue expanding its role as a servant and leader of the citizens of the State by disseminating knowledge and providing a broad variety of educational services to the public.
4. To identify and develop the talents of all students who have potential to do college work and who are enrolled in its various disciplines.
5. To provide an intellectual atmosphere which stimulates students and faculty to apply knowledge and skills toward the improvement of humanity and society.

The School is housed in the W. W. Lawson Hall Agriculture Building and the Walter S. Davis Home Economics Building which are located in the eastern section of the campus.

## AGRICULTURE

### ACADEMIC DEPARTMENTS

#### RURAL DEVELOPMENT

Rural Economics & Community  
Resource Development Option  
Agricultural Education Option

#### ANIMAL SCIENCE

Pre-Veterinary Medicine Option

#### PLANT SCIENCE

Agromony Option  
Horticulture Option

## HOME ECONOMICS

Home Economics Education  
Home Economics  
Child Development and Family  
Relationships  
Clothing and Textiles  
Food and Nutrition  
Early Childhood Education

## Department of Animal Science and Pre-Veterinary Medicine

**C. L. Fenderson, Ph.D.,  
Acting Head**

The Department of Animal Science offers a curriculum of courses designed to (1) give instruction in the principles of (a) livestock production, management, sanitation, health, and (b) processing and caring for animal products, and (2) to prepare students to enter schools of Veterinary Medicine.

A major in Animal Science is offered leading to the degree of Bachelor of Science. To satisfy the requirements for the degree without teacher certification, the student must complete a minimum of 24 credit hours in the major field, with a minimum of 10 hours in 300 and 400 level major field courses. A student is eligible for graduation when 132 semester hours have been completed with a minimum cumulative grade point average of 2.0. A student who desires to minor in Animal Science must complete a minimum of 18 semester hours in the Department. Work leading to the degree of Master of Science is offered.



Employment opportunities are available in State Government, U.S. Department of Agriculture, and private enterprises in the following areas: Meat Inspection, Meat Cutting, Sales, Veterinary Medicine, Ranching, Meat Packing, Biochemistry, Peace Corps, Poultry Plant Operation, Livestock Inspection, Animal Nutrition, Dairy Plant Management, Marketing, Industrial Research, Government Service, Market Milk Production, Feed manufacturing, etc.

#### CURRICULUM FOR MAJOR IN ANIMAL SCIENCE

FRESHMAN YEAR	Credit	Hours
	Fall	Spring
AGR 111 .....	1	
ART 133; MUS 131 .....	2	2
AH 101; PLS 102 .....	3	3
ENG 101, 102 .....	3	3
MATH 111, 112 .....	3	3
PE or AFROTC .....	1	1
GPA 221 .....	3	
Elective (100 level) .....		3
	16	15
JUNIOR YEAR		
	Credit	Hours
	Fall	Spring
CHEM 360; PH 302 .....	5	3
AH 321, 302 .....	3	3
AH 313, 322 .....	3	3
RD 301, 302 .....	3	3
PLS 300-400 .....	3	3
Elective .....		3
	17	18
SOPHOMORE YEAR		
	Credit	Hours
	Fall	Spring
HIST 201, 202 .....	3	3
ENG 211, 212 .....	3	3
CHEM 121, 122 .....	3	3
PH 201, 202 .....	3	3
MCB 205; HRT 202 .....	3	3
PE or AFROTC .....	1	1
	16	16
SENIOR YEAR		
	Credit	Hours
	Fall	Spring
AH 311, 323 .....	3	3
ENG 301 .....	3	
AH 401, 402 .....	3	3
AH 421, 422 .....	1	1
BCHM 341, 342 .....	5	5
AH 450 .....	3	
AH 403 .....		3
	18	15

#### PRE-VETERINARY MEDICINE

Students interested in Veterinary Medicine will be able to substitute some of the courses listed in the Animal Science curriculum, with courses in the following areas:

Physics—8 semester hours  
 Zoology—10 semester hours  
 Embryology—3 semester hours  
 Physiology of Reproduction—3 semester hours  
 Poultry Husbandry—303—3 semester hours  
 Poultry Husbandry—403—3 semester hours  
 Poultry Husbandry—422—3 semester hours

#### COURSE DESCRIPTIONS

##### ANIMAL HUSBANDRY (AH)

**AH101. Introductory Animal Husbandry. (3)** Devoted to the adaptation of the different classes of farm livestock to varying farm conditions and to the relationship of each class to the other in different farm plans. A careful study of correct type of livestock in the relationship to economical production and market demands. Two lectures and one laboratory period.

**AH211. Introduction to the Care and Riding of Light Horses. (3)** Designed for men and women in the University who are interested in horseback riding. Elementary principles of feeding, housing, training and riding light horses given; the proper care and adjustment of riding equipment also stressed. One lecture and two laboratory periods.

**AH302. Livestock Management. (3)** Nutrient requirements for farm animals, livestock feeds, nutrient contents, and factors affecting value, management, marketing procedures and practices.

**AH311. Feeds and Feeding. (3)** A study of the basic principles of feeding farm animals, feeding standards, balanced rations, composition and nutritive value of feeds. Two lectures and one laboratory period.

**AH 313. Disease and Parasites. (3)** A study of the causes, symptoms, and treatment of general diseases and parasites of livestock and poultry with special emphasis on sanitation. Prerequisite: Biology 241. Two lectures and one laboratory period.

**AH321. Swine Production. (3)** A study of the breeding, management, feeding and marketing of swine. Emphasis placed on both pure bred and commercial production. Two lectures and one laboratory period.

**AH322. Beef Cattle Production. (3)** History, development, and distribution of breeds; sources of cattle and carcass beef, production and distribution in cattle feeding, commercial and pure bred breeding herds. Performance testing and S-10 Beef Cattle Programs. Two lectures and one laboratory period.

**AH323. Evaluation and Judging Dairy Products. (3)** Composition, use, market grades, methods of storage and factors affecting keeping quality of dairy products, judging, scoring, and placing dairy product in accordance with their values.

**AH401. Market Milk. (3)** A study of the procurement, processing and sale of milk and the bacteriological, chemical and physical aspects of market milk processing, prerequisites: AH 301—two lectures and one laboratory period.

**AH402. Science of Meat. (3)** Composition, physical, chemical and nutritional properties of meat and meat products. Biochemical alternations of meat during aging, curing, processing and storage.

**AH403. Dairy Farm Operations. (3)** A study of general farm operation, adaption of the herd to available facilities, factors affecting production, balancing rations for dairy cattle, disease control, principles of modern dairy cattle breeding, arrangement and development of dairy farm buildings. Prerequisites: Animal Husbandry 311. Two lectures and one laboratory period.

**AH421-22. Seminar. (2)** Devoted to discussions of current literature and problems in animal husbandry. Required of seniors majoring in the department. One hour credit each semester. One lecture.

**AH450. Senior Project. (3)** Required of all Animal Husbandry majors.

**AH451. Physiology of Reproduction. (3)** Fundamental principles of the physiology of reproduction with primary emphasis on farm animals. Anatomy of the male and female reproductive tracts; hormones, estrus and estrus cycle; ovulation, gestation, parturition, lactation, fertility, sterility and artificial insemination.



**POULTRY HUSBANDRY (PH)**

**PH201. Principles of Poultry Production.** (3) The principles and practices underlying reproduction and growth of the domestic fowl; also the study of breeds, varieties, and types of poultry. Required of all majors in Agriculture. Two lectures, and one laboratory period.

**PH202. Principles and Practices of Incubation and Brooding.** (3) Designed to give the environmental factors affecting incubation, embryo development, operation of incubators, and methods of brooding. Required of majors in Agriculture. Two lectures and one laboratory period.

**PH302E. Animal and Plant Genetics.** (3) A study of the fundamental laws of heredity and their relation to plants and animals. Two lectures and one laboratory period.

**PH303. Processing Poultry products.** (3) A detailed study of grades and classes of market poultry and eggs; methods of processing, storage, preservation, and problems in plant operations. Two lectures and one laboratory period.

**PH403. Poultry Hygiene and Sanitation.** (3) Designed to give the major principles underlying sanitation and disease prevention as applied to the poultry farm. Two lectures and one laboratory period.

**PH422. Poultry Nutrition and Feeding.** (3) Designed to give the students the major principles of poultry nutrition, including required nutrition by poultry and means of supplying these nutrients under practical feeding conditions. Poultry feedstuffs, ration formulation, and feeding practices considered. Two lectures and one laboratory period.



# DEPARTMENT OF HOME ECONOMICS

## GENERAL STATEMENT

The purpose of the undergraduate program in the Department of Home Economics is to provide, through the facilities in the Department and the University, both a liberal and specialized education in which the interests and well-being of individuals, family members, and consumers are significant. The program of liberal studies is based on the natural and social sciences, the humanities, and the arts and is designed toward man's understanding of himself and his relationship to his environment. Specialized studies provide an understanding of man's needs and interests specifically with regard to nutrition, food, health, clothing, textiles, housing management of resources, care and guidance of children, interpersonal relationships, and family relationships. With emphasis on breadth of knowledge and its application to the solution of contemporary human problems, Home Economics provides education required for successful professional work performance in an ever-increasing variety of positions made possible in a society characterized by rapid technological and sociological change.

## THE GOALS

The Department of Home Economics seeks to prepare men and women for (1) leadership roles in professional fields, (2) graduate and professional specialization, (3) teaching on all levels (nursery school/ kindergarten to graduate), (4) careers in business areas, (5) consumer competence, (6) community services, (7) civic responsibility, (8) aesthetic appreciation, (9) social understanding, (10) wholesome family and interpersonal relations, and (11) an improved quality of life.

In keeping with the purposes of higher education the Departmental program is based on its commitment to excellence in instruction, research, and public service.

The Department of Home Economics is fully accredited by the American Home Economics Association.

## STUDENT ORGANIZATIONS

The student member section of the American Home Economics Association (AHEA-SMS) is a professional organization, open to all students majoring in Home Economics, regardless of concentration interest. Membership is expected of all students. Other professional organizations within the Department include the Dietetic Club, open and expected of Food and Nutrition majors, and the Beta Sigma Chapter of Kappa Omicron Phi, National Honor Society in Home Economics. Kappa Omicron Phi is open to Departmental majors who achieve scholastically and meet membership requirements.

## DEGREE REQUIREMENTS

A candidate for the Bachelor of Science degree in Home Economics must complete the minimum University requirements for graduation with a 2.0 or better quality point cumulative average as outlined in the University catalog. The minimum requirements include general studies and general home economics components designed to prepare students in the areas of behavioral and humanistic studies, natural sciences, communications, and the areas of specialization. The components provide an awareness of the political, social, and economic forces in society and the impact of these forces on individuals and families.

Degree candidates in areas of teacher certification must meet requirements designed for teacher education as outlined in the University catalog.

Departmental students who qualify for participation in the University Honors Program are encouraged to seek entrance to the program. Participants in the Honors Program will be graduated with University Honors if all requirements are met. Minimum requirements are listed in the University catalog.

## CURRICULA

The Home Economics Department offers degree programs at the undergraduate level in the following areas:

Home Economics Education  
Home Economics, with options or concentrations in:  
Child Development and Family Relationships  
Foods and Nutrition



Clothing and Textiles  
Early Childhood Education

All curricular programs include general and professional studies to provide depth, breadth, and quality in the preparation of home economists. Concepts included in the over-all programs meet the following four criteria: (1) universality, (2) relevance to today and the future, (3) continuity, and (4) adaptability. There is a common body of knowledge or core derived from the general studies component and from specific courses in home economics and which is also relevant to each of the areas of specialization. The concepts common to all programs include some understanding of: (1) the family in society, (2) human growth and development in relation to nutrition, (3) human development and its relation to the family, (4) management of human and material resources, (5) aesthetic qualities in the environment, (6) the influence of science, technology, and consumer economics upon families and family members, and (7) the philosophical base of home economics and the relation of its specialties to the field as a whole.

The common discipline includes the professional abilities to: (1) identify needs, values, and problems of individuals, families, and groups of families in various levels of society; (2) recognize unique contribution of home economics to these needs and also contributions of other related professions; (3) seek out the specific knowledge and resources appropriate to the solution of individuals or family problems; (4) use the most effective means of applying the knowledge to meet the needs; and (5) evaluate the results of this diagnosis of need, knowledge brought to bear, and application of such knowledge, in order to improve the professional performance.

A variety of program possibilities can be explored by students within the Department and with other programs. Election of a minor field is encouraged.

HOME ECONOMICS EDUCATION

A major in Home Economics Education prepares for the achievement of competencies important to teaching in public and private schools, vocational schools, and in specialized adult education programs. It also prepares for positions in Extension Service, Home Economics in Business and Industry. The curriculum in Home Economics meets the requirements set up by the Tennessee Board of Vocational Education for teaching home economics, and is designed to qualify graduates to teach vocational home economics under the requirements of the National Vocational Education Act. Majors must meet admission and retention requirements for Teacher Education.

CURRICULUM FOR HOME ECONOMICS  
EDUCATION  
(Bachelor of Science Degree with  
Certification)

FRESHMAN YEAR	Credit Hours	
	Fall	Spring
Eng 101-102 .....	3	3
Hist 201-202 .....	3	3
Math 111, CHM 121 .....	4	4
PE or AFROTC .....	1	1
HEED, 101, RA 201 .....	1	2
CLT 111, Fds 111 .....	3	3
Art 133 or Music 131 .....	2	
	17	16
SOPHOMORE YEAR	Credit Hours	
	Fall	Spring
ENG 211-212 .....	3	3
Zoo 201, HEED 312 .....	4	3
CLT 211, Psy 242 .....	3	3
Fds 223, Ntr 211 .....	3	3
EDCI 201, *Soc Sci Elective .....	3	3
PE or AFROTC .....	1	1
	17	16
JUNIOR YEAR	Credit Hours	
	Fall	Spring
CLT 321, Psy 312 .....	3	3
HEED 387 *HEED Elective .....	3	3
EDCI 301 .....		3
ECCD 351, *ECCD Elective .....	3	3
Ntr 411 or *Ntr Elective .....	3	
HMgt 321-433 .....	3	3
RA 323, Phil 201 .....	2	2
	17	17
SENIOR YEAR	Credit Hours	
	Fall	Spring
EDSE 465-EDRD 491 .....	3	3
ECCD 463 .....	3	
HEED 371 .....		3
HEED 450 .....	3	
HEED 472 .....		9
*Electives .....	8	
	17	15

\*Electives should be chosen with approval of major adviser

Curriculum for Occupational Home  
Economics Endorsement

Home Economics Education majors who also desire certification with occupational endorsement may elect from three endorsements: (1) Option I—Food Management, Production, and Service; (2) Option II—Clothing Management, Production, and Service; or (3) Option III—Care and Guidance of Children.

Occupational Endorsements (select one)	
13-15	
Option I	
Food Management, Production, and Service	14
HEED 443 or 543	3
HEED 460	2
Fds 313-412	6
Fds 452	3

Option II	
Clothing Management, Production, and Service	12-15
HEED 443 or 543	3
HEED 459	2
CLT 401 and/or 403	2-5
CLT Elective	3
CLT 322	2

Option III	
Care and Guidance of Children	13
HEED 443 or 543	3
HEED 458	2
ECCD 332	2
ECCD 452-460	6

EARLY CHILDHOOD EDUCATION

The Early Childhood Education Program is designed to prepare competent and qualified teachers and teaching assistants for work with children during their nursery, kindergarten, and primary-grade years. The learning experiences are arranged so that a student may qualify for employment as a teaching assistant after completion of two years of study—the Associate Degree Program. The students who choose to remain (or return) for an additional two years can earn the Bachelor of Science degree and complete requirements for certification as a teacher at the kindergarten primary level.

A special feature of the program is the provision for early laboratory experiences with young children prior to student teaching. Well designed and equipped nursery school and kindergarten laboratories are located on campus in the recently constructed Walter S. Davis Complex.

CURRICULUM FOR EARLY  
CHILDHOOD EDUCATION  
(Bachelor of Science Degree  
with Certification K-3)

FRESHMAN YEAR	Credit Hours	
	Fall	Spring
ENG 101-102 .....	3	3
ECCD 101, HEA 151 .....	3	2
MATH 111 .....	4	
SCI 121-122 .....	4	4
ART 133 or MUS 131 .....		2
PE or AFROTC .....	1	1
HEED 101 .....	1	
GEOG 171 or 172 .....		3
	16	15
SOPHOMORE YEAR	Credit Hours	
	Fall	Spring
ENG 211-212 .....	3	3
EDCI 201 .....	3	
HIST 201-202 .....	3	3
ECCD 201-332 .....	3	2
CLT 112, PSY 242 .....	2	3
PE 300 .....	2	
HEA 307e .....		2
MATH 211 .....		3
PE Electives (20's-50's) .....	1	1
	17	17



JUNIOR YEAR	Credit Hours	
	Fall	Spring
MUS 301, ART 360.....	3	3
SCI 301 .....	3	
EDCI 301-387 .....	3	3
PSY 312, ECCD 351 .....	3	3
ECCD 352 .....	2	
ECCD 464 .....		4
ENG 320 or LS 363 .....	3	
NTR 433 .....		2
	17	15

SENIOR	Credit Hours	
	Fall	Spring
EDCI 322 .....	3	
ECCD 460-461 .....	3	3
EDRD 324 .....		3
EDCI 321 .....		3
ECCD 472 .....		9
ECCD 450 or HE 450 .....	3	
EDSE 465 .....	3	
Elective (300-400 level) .....	3	
	15	18

Students with a concentration in Child Development and Family Relationships who desire certification should elect a minor in Home Economics Education. (Follow Teacher Education Program)  
\*Child Development with Home Economics Education Minor

**HOME ECONOMICS**  
**(Child Development and Family Relationships Concentration)**

A major in Home Economics with concentration in Child Development and Family Relationships prepares graduates (1) to work with children in nursery schools, day care centers, and other institutions concerned with children; (2) to serve as Child Development and Family Relationships specialists at state and local levels, directors of programs for children in religious institutions, and leaders of Girl Scouts programs. An additional focus offers academic and practical experiences centered around the developmental tasks of young children and is designed in cooperation with Elementary Education. Students desiring teacher certification in public school kindergartens and elementary schools will take additional education courses to meet certification requirements.

**CURRICULUM FOR CHILD DEVELOPMENT AND FAMILY RELATIONSHIPS**  
**(Bachelor of Science Degree with or without Certification)**

FRESHMAN YEAR	Credit Hours	
	Fall	Spring
ENG 101-102 .....	3	3
ART 133, MUS 131 .....	2	2
PE 111 or 112 or AFROTC.....	1	1
MATH 111 .....		4
SCI 121-122 .....	3	3
ECCD 101 .....	3	
HIST 201-202 .....	3	3
HEED 101 .....	1	
	16	16

SOPHOMORE YEAR	Credit Hours	
	Fall	Spring
ENG 211-212 .....	3	3
RA 201 .....		3
PE or AFROTC .....	1	1
ZOO 201, NTR 211.....	4	3
ED 201, PSY 242 .....	3	3
ECCD 201-332 .....	3	2
CLT 111, SP 111.....	3	
	17	18

JUNIOR YEAR	Credit Hours	
	Fall	Spring
HMgt 321 or HMgt 433 .....	3	3
ECCD 351-353 .....	3	2
ECCD 352-433 .....	3	3
Ntr 433, ECCD 460 .....	2	3
EDCI 301 .....	3	
Psy 311 or 312* .....		3
Soc 211 .....		3
Electives (300-400 level) .....	3	
	17	17

SENIOR YEAR	Credit Hours	
	Fall	Spring
ECCD 461-462 .....	3	3
ECCD 463-450, HE 450.....	3	3
ECCD 464-466 .....	3	9
Electives.....	7	
	16	15

Students with a concentration in Child Development and Family Relationships who desire certification should elect a minor in Home Economics Education. (Follow Teacher Program)  
\*Child Development with Home Economics Education Minor

Courses Required	Credit Hours
HEED 312	3
HEED 387	3
HEED 371	3
HEED 472	9
EDCI 465	3
EDRD 491	3
Fds 111-223	6
CLT 211-321	6

\*Elect Psy 312 rather than 311, Elect HMgt 321 and 433

**CURRICULUM IN EARLY CHILDHOOD EDUCATION**  
**(Associate Degree)**

The Early Childhood and Child Development associate degree curriculum is a two-year program designed to prepare students for employment in nursery schools, day care centers, and pre-school enrichment programs. The curriculum is competency based and can be credited toward the four-year program for a Bachelor of Science degree, if desired.

FRESHMAN YEAR	Credit Hours	
	Fall	Spring
Eng 101-102 .....	3	3
Sci 121-122 .....	4	4
Art 1332 or Mus 131.....	2	
HEA 151 .....		2
Math 111 .....		4
ECCD 201-166.....	3	2
PE 11-12 .....	1	1
ECCD 101, HE 101.....	3	1
	16	17

SOPHOMORE YEAR	Credit Hours	
	Fall	Spring
HEA 201 .....	2	
Eng 211-212 .....	3	3
EDCI 201 .....	3	
Hist 201-202 .....	3	3
Psy 242 .....		2
ECCD 232-266 .....	2	3
ECCD 251-252 .....	3	3
ECCD 253 .....	2	
SPCH 210 or 220 .....		3
	18	17

**COURSE OFFERINGS**

Curriculum in Early Childhood and Child Development

**ECCD 166. Observations and Internship.** (2) Course provides opportunities for observation and practice work in pre-school programs for young children.

**ECCD 232. Art for Young Children.** (2) Course includes self-directed activities in art and creative play experiences.

**ECCD 251. The Young Child.** (3) A contemporary modularized course of instructions designed to familiarize students with the philosophy and basics of child development and to increase their competencies in working with children. Outside experiences, guest lectures, and multi-media approaches are arranged.

**ECCD 252. Observation.** (3) Observation in nursery school, kindergarten, and other pre-school programs for young children.

**ECCD 253. Internship in Infant Programs.** (2) Observation and participation in infant laboratories.

**ECCD 266. Internship in Early Childhood and Child Development.** (3) Course provides participation and fieldwork in community nursery schools and other preschool programs for young children.





## HOME ECONOMICS (CLOTHING AND TEXTILES)

A major in Home Economics with concentration in Clothing and Textiles opens many possibilities to students who wish to use clothing in a general sense for their personal and family development, to those who have a well-defined vocational aim, and to those who anticipate graduate study.

Opportunities for employment in Clothing and Textiles may be grouped into three broad categories as (1) manufacturing, (2) merchandising, and (3) consumer services, including teaching. The level at which any individual student may enter the field depends on other factors not included in the curriculum. A student's prior work experience and academic competence tend to be related to the level of entry in the job market.

Specific careers open to the graduate may include (1) Assistant Buyer, (2) Assistant to the Buyer, (3) Trainee, (4) Assistant to the Manager, (5) Consumer Representative, (6) Clothing Specialist, and (7) Free Lance Dressmaker and Designer.

## CURRICULUM FOR HOME ECONOMICS (CLOTHING AND TEXTILES) (Bachelor of Science Degree)

FRESHMAN YEAR	Credit Hours	
	Fall	Spring
Eng 101-102 .....	3	3
CLT 111-112 .....	3	2
Math 111-112 .....	4	3
HEED 101 .....		1
Fds 111, RA 201 .....	3	2
Art 133 .....		3
PE or AFROTC .....	1	1
History 201-202 .....	3	3
	17	17

SOPHOMORE YEAR	Credit Hours	
	Fall	Spring
Eng 211-212 .....	3	3
CLT 203-211 .....	3	3
Psy 201 .....	3	
Fr 101 or 201* .....	4	
Chem 121-122 or other .....		
Science .....	4	4
Speech 210 or 220 .....		3
GPA 211 or Soc Sci .....		3
PE or AFROTC .....	1	1
	18	17

JUNIOR YEAR	Credit Hours	
	Fall	Spring
CLT 303-302 .....	3	3
ECCD 351 .....	3	
HMgt 321 .....	3	
Phil 201 or Thea 301 .....		2
Eng 301 .....		3
RA 301 .....		2
Ntr 312 .....	3	
MK 326 .....		3
**Electives .....	3	3
	15	16

SENIOR YEAR	Credit Hours	
	Fall	Spring
CLT 321-403 .....	3	3
CLT 450 or HE 450 .....	3	
RA 323-421 .....	2	3
ECCD 463 .....	3	
MK 328 .....	3	
HMgt 322** .....		
**Electives .....	3	6
	17	15

\* If High School Record Shows One (1) year of French

\*\* Electives should be chosen with the approval of the advisor. Students interested in retailing and merchandising should, in addition to the courses listed in the Clothing and Textiles curriculum, elect from the following courses: C&T 320, C&T 401, C&T 413; Marketing 329, 334, 350, 412, 431, 444, or 451.

\*\*\*Foods 452 may substitute Home Management 322.



## HOME ECONOMICS (FOODS AND NUTRITION)

A major in Home Economics with concentration in Foods and Nutrition is designed to develop (1) sound basic up-to-date knowledge in the field of foods and nutrition, (2) the ability to interpret basic facts and apply sound judgement in the translation of these facts to actual situations, and (3) to develop the skills and techniques required to apply basic principles to methods of preparation. The program is designed to meet the requirements for entrance into an approved dietetic internship—or traineeship.

Graduates with a concentration in foods and nutrition may choose a career in nutrition care, education and/or research; or may continue graduate studies. Some career opportunities are (1) Food Service Supervisor, (2) Dietitian, (3) Dietetic Assistant, (4) Industrial Feeding Specialist, (5) Airline Food Service Supervisor, (6) Dietitian for Restaurant Chain, (7) School Food Service Specialist, and (8) School Food Service Manager.

## CURRICULUM FOR FOODS AND NUTRITION (Bachelor of Science Degree)

FRESHMAN YEAR	Credit Hours	
	Fall	Spring
Eng 101-102 .....	3	3
History 201-202 .....	3	3
Math 111-112 .....	4	3
Fds 111-223 .....	3	3
HEED 101, RA 201 .....	1	2
PE 11-12 or AFROTC .....	1	1
Art 133 or Mus 131 .....	2	
	17	15

SOPHOMORE YEAR	Credit Hours	
	Fall	Spring
Eng 211-212 .....	3	3
Chem 121-122 .....	4	4
Psy 242, *Soc 211 or .....		
Psy 201 .....	3	3
Zoo 201, Ntr 211 .....	4	3
EC 211, C&T 111 .....	3	3
PE or AFROTC .....	1	1
	18	17

JUNIOR YEAR	Credit Hours	
	Fall	Spring
Ntr 311, Fds 311 .....	2	3
Chem 360, Bio Chem 320 .....	5	4
ECCD 351, Eng 301 .....	3	3
Phil 201, Mrcb 250 .....	2	4
Mus 301, *Soc 320 .....	3	3
	15	17

SENIOR YEAR	Credit Hours	
	Fall	Spring
Fds 412*, Fds 313* or 321 .....	3	3
Fds 452* or 352, Ntr 411 .....	3	3
Ntr 450, or HEED 450 .....	3	
HMgt 433, Mgt 423 .....	3	3
HEED 371, *Psy 311 .....	3	3
Ntr 453, *Elective .....	3	3
	18	15

\*Required of students for dietetic programs.  
Curriculum for Foods and Nutrition Minor

A minor in Foods and Nutrition may be elected by any student enrolled in the Department of Home Economics. Two options are available: (1) Foods and Nutrition or Food Service, and (2) Dietetics (with Diet therapy).

Courses Required	Credit Hours
FDSs 111	3
FDSs 223	3
Ntr 211	3
Ntr 311	2
FDSs 313	3
FDSs 412	3
FDSs 452	3
Ntr 453	3

Curriculum for Related Art Minor  
A minor in Related Art may be elected by any student enrolled in the Department of Home Economics or in any major field within the University. Three options are available, students may select one of the following: (1) Option I—Related Art Minor; (2) Option II—Interior Design Emphasis; or (3) Option III—Costume Design Emphasis.



Option I—Related Art Minor

Courses Required	Credit Hours
RA 201	2
CLT 203	2
RA 301	2
Art 241	3
RA 323	2
RA 350	2
RA 411	2
RA 421	3

Option II—Related Art Minor with Interior Design Emphasis

Courses Required	Credit Hours
RA 323	2
AE 201	2
CLT 203	2
RA 301	2
RA 201	2
RA 421	3
RA 411	2
HMgt 320	3
*Electives	5

Option III—Related Art Minor with Costume Design Emphasis

Courses Required	Credit Hours
RA 323	2
AE 201	2
CLT 203	2
RA 301	2
RA 201	2
RA 421	3
RA 411	2
HMgt 320	3
*RA Electives	5

\*Upon the advice of the Related Art Instructor

Careers with a minor in Related Art include (1) Advertising Artist, (2) Clothing Designer, (3) College or High School Teacher, (4) Color Coordinator, (5) Consumer Information Specialist, (6) Costume Designer, (7) Crafts Instructor, (8) Department Store Buyer, (9) Display Designer, (10) Extension Specialist, (11) Fabrics Coordinator, (12) Fashion Illustrator, (13) Interior Decorator, (14) Magazine Editor, (15) Package Designer, (16) Product Developer, (17) Textile Designer, (18) Therapist, (19) Visual Aids Specialist, (20) Kitchen Planner, (21) Utility Home Economist, (22) Lighting or Laundry Consultant, (23) Equipment Designer, (24) Consumer Consultant and (25) Research Specialist.

CHILD DEVELOPMENT  
ASSOCIATE TRAINING  
PROGRAM

In response to the increased need of the early childhood education and child care community in Middle Tennessee for quality preparation of staff, Tennessee State University during 1977-78 developed a training program related to the national Child Development Associate (CDA) competencies. These competencies serve as a guide to curriculum development and course offerings in the TSU CDA Program.

The curriculum and courses have been carefully designed to provide a practical training plan which meets the unique needs of in-service personnel. Flexible schedule and practically oriented instruction is offered while at the same time comprehensive coverage of the CDA competency area is maintained. Individuals entering the program may proceed at their own pace in completing any of the 30-39 credit hours of courses available which they need.

Since the training plan is directly related to the national CDA competencies, students are prepared to apply for assessment by the national CDA Consortium and to seek award of the CDA Credential. Students, with assistance from their program advisor, determine the point during their program of training that their performance demonstrates the competency standards of the national CDA Consortium.

The national CDA competencies fall into six broad competency areas which are further defined into 13 functional areas. The functional areas provide definition of the indicators of competent performance. These competency and functional area definitions provide a foundation for the training program as well as assessment.

CDA training is competency based and is, therefore, unlike traditional approaches to professional training. CDA trainees may earn viable college credit before, during and following their involvement in the CDA assessment process. The CDA credential is awarded based upon demonstrated ability rather than solely upon courses taken or degrees awarded. Academic credit for CDA training is also awarded based upon demonstrated ability along with completion of commonly held standards for academic credit such as instructor-student contact, knowledge of subject, and course matriculation. The TSU CDA training program brings these two aspects of professional credentialing (academic and demonstrated professional standards) into a complementary relationship, fulfilling the six national CDA training criteria.

NATIONAL Criteria:

1. Training must be organized around the CDA competencies.
2. Fifty percent (or more) of the training must consist of supervised field experience.
3. Academic and field experiences must be integrated.
4. Training must accommodate individual strengths, individual needs and learning styles.
5. Scheduling must be flexible.
6. Valid, transferable college credit must be offered for both academic and field experiences.

The following course descriptions provide an outline of how the TSU CDA training program addresses each of these six criteria. The TSU training program is designed to meet the needs of preschool, early childhood, head start, and nursery school teachers, who work with children ages 3-5 years in the Middle Tennessee Area. This approach to the total child care community allows for a comprehensive training program.

The CDA Course Curriculum is designed as a two year academic program. Students will enroll in two academic courses and two practicums on an average during the academic year (Fall and Spring semesters). All course offering will be based on individual needs assessment and can be offered during any semester on an Independent study or through arranged instructor-student contract.

First Year of Enrollment

- Early Childhood/Child Development ECCD 211
- Early Childhood/Child Development ECCD 212
- Early Childhood/Child Development ECCD 221
- Early Childhood/Child Development ECCD 222

Second Year of Enrollment

- Early Childhood/Child Development ECCD 231
- Early Childhood/Child Development ECCD 232
- Early Childhood/Child Development ECCD 241
- Early Childhood/Child Development ECCD 242

Summer Semester or Optional for the Second Year—Regular Semesters

- Early Childhood/Child Development ECCD 251
- Early Childhood/Child Development ECCD 252
- Early Childhood/Child Development ECCD 253, 254, or 255

**ECCD 253-254-255. Problems in Providing Care for Young Children. (3,3,3)** Individualized experiences for early childhood caregivers. Consent of instructor.



**ECCD 211. Problems in CDA Competency Area 1. (3)** Individualized study for early childhood caregivers in setting up and maintaining safe and healthy learning environments for young children. Must be taken in conjunction with ECCD 212 or by consent of instructor.

**ECCD 212. Practicum: Safe, Healthy Learning Environments. (3)** Caregivers demonstrate ability to set up and maintain safe and healthy learning environments for young children. Consent of Instructor.

**ECCD 221. Problems in CPA Competency Area 2. (3)** Individualized study for caregivers in learning to advance the physical and intellectual development of young children. Must be taken in conjunction with ECCD 222 or by consent of instructor.

**ECCD 222. Practicum: Physical and Intellectual Competency. (3)** Caregivers demonstrate ability to advance the physical and intellectual development of young children. Consent of instructor.

**ECCD 231. Problems in CDA Competency Area 3. (3)** Individualized study for caregivers building positive self-concept and individual strength in young children. Must be taken in conjunction with ECCD 232 or by consent of instructor.

**ECCD 232. Self-Concept and Individual Strength. (3)** Caregivers demonstrate ability to build positive self-concept and individual strength in young children. Consent of instructor.

**ECCD 241. Problems in CDA Competency Area 4. (3)** Individualized study for caregivers in organizing and sustaining the positive functioning of young children and adults in a group in a learning environment. Must be taken in conjunction with ECCD 242 or by consent of instructor.

**ECCD 242. Practicum: Positive Functioning of Children and Adults in a Group. (3)** Caregivers demonstrate ability to organize and sustain the positive functioning of young children and adults in a group in a learning environment. Consent of instructor.

**ECCD 251. Problems in CDA Competency Areas 5 and 6. (3)** Individualized study for caregivers in coordinating home and center and carrying out supplementary responsibilities. Must be in conjunction with ECCD 252 or by consent of instructor.

**ECCD 252. Practicum: Home, Center and Supplementary Responsibilities. (3)** Caregivers demonstrate ability to establish positive and productive relationships with parents; encourage parents to participate in the center's activities, policies, and rules. Consent of instructor.

**ECCD 331-333-334. Internships for Trainers. (3,3,3)** Individualized internship experiences for persons interested in providing child caregiver training. Consent of instructor.

## COURSE OFFERINGS

### Home Economics Education (HEED)

**HEED 312. Introduction to Vocational Education. (3)** An introductory course specifically oriented to the philosophy and objectives of vocational education and the role of home economics in relation to it. Special emphasis is given to the study of consumer homemaking and occupational home economics as major aspects of home economics in vocational education and the Vocational Education Acts.

**HEED 371. Teaching Home Economics. (3)** Emphasis is placed on the organization and administration of the school and the place of home economics within the school organization, the vocational homemaking program, the Vocational Education Acts, and the introduction to teaching strategies and tactics. Opportunity is provided for experimentation and operation of materials and teaching aids. Emphasis is placed on program planning for youth organizations, adult groups and home experiences. Supervised observation is required.

**HEED 372. Special Problems in Home Economics Education. (3)** Course is designed for individual and group projects focused on recent research findings and general depth in subject matter. A critical analysis of personal and academic problems related to teacher preparation will be undertaken.

**HEED 373. Home-School-Community Programs in Vocational Home Economics. (2)** Course is based on interpretation and requirements of federal, state, and local regulations in relation to vocational home economics.

**HEED 387. Problems of the Curriculum and Teaching. (3)** A study of the reorganization, construction, and administration of the home economics curriculum, specifically those under vocational education legislation. Attention is given to the historical analysis of home economics, the bases of curriculum planning, the competency-based approach, development of modules, interaction analysis and micoteaching.

**HEED 443. Occupational Home Economics Education. (3)** Designed primarily for teachers and school personnel in Vocational Education. The course deals with (1) philosophy, legislative background, theory, and development of programs in pre-occupational home economics education; (2) the identification and application of research in problem solving; and (3) decision-making concepts applied to program design and implementation.

**HEED 450. Senior Project Writing. (3)** Instructs the student in techniques of professional writing, literature searching, and abstracting scientific material. Completion of acceptable project required. Open to all departmental majors.

**HEED 458. Field Experience and Internship in Occupational Care and Guidance of Children. (2)** Supervised experiences are provided for internship in actual work experiences in industry. Course includes class seminars.

**HEED 459. Field Experiences and Internship in Clothing Management, Production, and Service. (2)** Supervised experiences are provided for internship in actual work experiences in industry. Course includes class seminars.

**HEED 460. Field Experiences and Internship in Food Management, Production and Services. (2)** Supervised experiences are provided for internship in actual work experiences in industry. Course includes class seminars.

**HEED 461. Educational Leadership in Adult Education. (3)** Philosophy, organization, and administration of home economics programs for adults and out-of-school youths. Interests and needs of various age and social groups are studied in relation to methods and materials effective in group work. Findings of latest research and educational media such as radio and television are emphasized. Three lectures.

**HEED 472. Observation and Student Teaching in Home Economics. (9)** Experiences of supervised observation and teaching in the public schools in Tennessee are provided. Problems of organization and supervision basic to induction of teachers into the profession are explored. Supervised teaching is performed in off-campus teaching centers on a full-time basis for a period of nine weeks. Course is designed for both consumer and homemaking teacher education and for occupational home economics programs.

**HEED 473. International Travel. (3)** Study tour of European cultural centers, museums, and historical sites designed to develop an appreciation of the historical and cultural contributions of these countries. Visits include: England, France, Italy, Germany, Switzerland, Spain, Holland and Portugal.

**HEED 474. Honors Home Economics Education. (3)** Individual directed study and investigation based on Theoretical Principles, Philosophy, and Research in Home Economics Education.

**HEED 101. Home Economics as a Profession. (1)** An orientation course required of all home economics majors. Designed to acquaint students with home economics professions and to the life of the University. Special emphasis is placed on the philosophy and legislative background of home economics in relation to its contributions to both general and professional education. One lecture.

**HEED 450. Senior Project Writing. (3)** Instructs the student in techniques of professional writing, literature searching, and abstracting scientific material. Completion of acceptable project required. Open to all departmental majors.



**EARLY CHILDHOOD, CHILD DEVELOPMENT, AND FAMILY RELATIONSHIPS (ECCD)**

**ECCD 101. Freshman Practicum. (3)** A study of staff roles in a variety of pre-school programs for children in Middle Tennessee. The first half of the semester will be spent in observation, the second in a practicum as an aide functioning in a variety of roles.

**ECCD 201. Principles and Concepts of Child Development. (3)** A study of the basic principles and concepts of growth and development which serve as a foundation in understanding children.

**ECCD 332. Creative Arts for Young Children. (2)** An interpretation and involvement with (1) art learning activities, (2) self-directed activities and (3) integrated activities with emphasis on the role of creative play materials for the young child. Related activities and experiences with various old and new materials, and correlation of contemporary trends in Art Education. Observation and participation in the nursery school or kindergarten.

**ECCD 351. The Young Child and His Family. (3)** A contemporary based modularized course of instruction designed to familiarize students with the basics of child development and to increase their competencies in this area. Outside experiences, guest lectures and multimedia approaches are combined with regular classroom instruction to make a wide range of information available to students. The areas of concentration include the philosophy of child development, pregnancy and birth, and the development of the physical, mental socio-emotional and language characteristics of the child.

**ECCD 352. Nursery School Observation. (3)** Observation in nursery school along with Course 351. Required only of students concentrating in Child Development and Family Relationships.

**ECCD 353. Infant Clinic. (3)** Observation and participation at Meharry Medical College and the Infant Laboratory.

**ECCD 371. Methods and Techniques in Teaching Family Relationships. (1)** Concerned with methods and techniques of teaching family-social relationships. Attention is given to new materials and equipment currently being used by the federal government in various programs concerned with family life.

**ECCD 450. Senior Project Writing. (3)** Instructs the student in techniques of professional writing, literature searching and abstracting scientific materials. Completion of acceptable project required.

**ECCD 452. Child Practicum. (3)** A practicum in programs for young children in the Nashville community and the campus Early Learning Centers where students as interns apply theories covered in courses 451-352.

**ECCD 460. Nursery School and Kindergarten Methods. (3)** Includes methods, materials and modern trends on teaching in the nursery school and kindergarten. Organization, equipment and housing are studied in relation to the development of children at these levels.

**ECCD 461. Early Childhood Education Curriculum I. (3)** A study of individual differences among children and theories of child development. Curriculum is focused on competency based education principles.

**ECCD 462. Early Childhood Education Curriculum II. (3)** Students will study a variety of early childhood education programs, and will be involved in constructing and evaluating curricula in a workshop situation.

**ECCD 463. Family Relationships. (3)** Course is focused on a study of modern family life, giving special emphasis to the needs and activities of individuals as they relate to the development of the family throughout the life cycle.

**ECCD 464. Later Periods of Childhood. (3)** A study of the development of the child from later pre-school to adolescence (5-12 years). Prerequisite: ECCD 351

**ECCD 467. Honors Child Development and Family Relationships. (3)** An intensive investigation of a special area in Early Childhood/Child Development to advanced juniors and seniors showing special ability in ECCD and to students enrolled in the University Honors Program.

**ECCD 466. Internship or Fieldwork in Child Development. (5)** Opportunity is given to students to do practice work in nursery schools in the community and other agencies caring for children as well as the campus practice laboratory. Taken with approval of the coordinator of Child Development and Family Relationships.

**ECCD 472. Observation and Student Teaching. (9)** Experiences of supervised observation and teaching in the public schools are provided.

**CLOTHING AND TEXTILES (CLT)**

**CLT 111. Textiles. (3)** Consumer-oriented study of textiles, emphasizing fibers, yarns, fabric construction, finishes and socio-economic background of the textile and apparel industry in relation to end use.

**CLT 112. Cultural and Functional Concepts of Clothing and Textiles. (2)** An interdisciplinary study of clothing including cultural patterns, behavioral interactions, changing needs, technological developments and acquisition of clothing.

**CLT 203. History of Costume. (3)** The history of costume from ancient times to the present and the influence of social and economic conditions upon costume. Open to all students. One lecture and one laboratory period.

**CLT 211. Elementary Clothing Construction. (3)** Principles of clothing construction are applied to cotton, linen and synthetic fabrics. Use and care of sewing machines, sewing skills, and wardrobe inventory included. Open to all students. One lecture and two laboratory periods.

**CLT 300. Intermediate Clothing Construction. (3)** Principles of clothing construction are applied to synthetic blended fabrics. Use of commercial patterns, principles of fitting, and the use and care of sewing machines included. Prerequisite: Clothing 211

**CLT 302. Clothing of the Family. (3)** A study of the physiological, psychological, and aesthetic aspects of clothing for the family. Based on the needs of the students interested in child development, family relationships, teaching or social work. The study of family clothing problems from the standpoint of income, occupation, and health as well as aesthetic and psychological factors affecting all family members. Open to all students. Two lectures and one laboratory period.

**CLT 312. Applied Dress Design. (2)** Features the application of decorative design in clothing construction, pattern adaptation, and originality. Prerequisite: Related Art 301. One lecture and one laboratory.

**CLT 320. Needlecraft. (2)** A study of the fundamental techniques of knitting, crocheting, embroidery and lacemaking. Open to all students. One lecture and one laboratory period.

**CLT 321. Advanced Clothing. (3)** Deals with advanced construction methods. Emphasis is placed on selection, construction, and care of woolen garments. Prerequisite: Examination in construction skills. Juniors and seniors only.

**CLT 322. Flat Pattern Adaptation. (2)** A study of the principles and techniques of flat pattern design with application of these principles to commercial pattern alteration. The development of original designs emphasized.

**CLT 401. Problems in Clothing and Textiles. (2)** Special problems in the details of clothing construction, selection, and textiles selected and solved by the students. Also problems met in student teaching reviewed. Newer trends in clothing construction emphasized. Prerequisites: Clothing 211, and 321. Two lectures.



**CLT 403. Clothing Economics.** (3) A study of clothing as it relates to the consumer of clothing and textiles. Emphasis is placed on changing needs and desires, trends in clothing expenditures, legislation and care.

**CLT 413. Dress Design and Draping.** (2) A course in dress design with emphasis on originality and draping. Opportunity given to investigate sources of design and to practice various methods of designing. Prerequisites: Clothing 321. One lecture and two laboratory periods.

**CLT 450. Senior Project.** (3) Directed research in a relevant problem in clothing and textiles. Special attention is given to related publications. (With or without credit.)

**CLT 462. Honors Clothing and Textiles.** (3) An intensive study of the socio-psychological, technological, and anthropological aspects of clothing and textiles.

### FOODS (FDS)

**FDS 111. Basic Foods.** (3) A study of foods using an integrated approach, involves a study of food principles and the creative application of the principles in the solution of a problem or preparation of a product. Consideration of economics, sanitation, palatability; and nutritive quality of foods is emphasized. Course also includes exercises on food additives and new legislation as well as food selection, processing, and preservation.

**FDS 223. Meal Management.** (3) The planning preparation and service of nutritious, attractive meals at various cost levels for various occasions with emphasis on the conservation of time, energy and money.

**FDS 311. Experimental Foods.** (3) Designed to offer opportunity for independent laboratory work in the solving of practical problems in food preparation, experience in scoring, and standardizing experimental work. (e)

**FDS 312. Experimental Foods.** (3) Opportunity is provided for advanced individual study in experimental foods. Prerequisite: Foods 311 (e)

**FDS 313. Institution Equipment.** (3) Includes study of the kinds, selection, care cost, and maintenance of individual pieces of equipment and their use, and labor saving devices in food service organizations.

**FDS 321. Food Preservation.** (3) A study of conventional and new methods of preservation. Some laboratory work is done in freezing and canning of foods. Two lectures and one laboratory period. (e)

**FDS 352. Food Demonstration.** (3) A study of the principles and techniques involved in foods and the use of related equipment as applied to the needs of extension, business, classroom and community teaching. One lecture and two laboratory periods (e)

**FDS 412. Quantity Cookery.** (3) A study of methods of purchasing and storing foods in quantity, organization of labor, standards of work materials, and meal planning and preparation in large quantities. Some experience is gained in the University Cafeteria or other food facility. One lecture and two laboratory periods.

**FDS 452. Organization and Management.** (3) Includes a study of institutional food departments, professional ethics and qualifications for managers, employment procedures, personnel schedules and financial records. It also includes menu analyses, the development of standardized recipes, schedules and standardized recipes, schedules and standardized work procedures.

### NUTRITION (NTR)

**NTR 211. Elementary Nutrition.** (3) A general course in nutrition. A study of basic nutrition facts, relation of nutrition to health, nutritional

needs throughout the life cycle, and the relation of economics, sociological, psychological and cultural factors to the food intakes of individuals or groups.

**NTR 312. Nutrition for Elementary and Secondary Teachers.** (3) A general course in nutrition and its relation to health.

**NTR 311. Applied Dietetics.** (2) The fundamental principles of human nutrition as related to the construction of practical dietaries and the application of these principles of the feeding of individuals, families and groups.

**NTR 411. Advanced Nutrition.** (3) A study of chemical physiological factors in digestion, absorption, and metabolism and dietary interrelationships. Reports of recent research and their relation to problems of human nutrition are studied. Prerequisite: Nutrition 211.

**NTR 433. Child Nutrition.** (2) The study of nutrition as it relates to children from prenatal life through adolescence. Prerequisite: Nutrition 211.

**NTR 450. Project Writing in Foods and Nutrition.** (3) Instructs the student in techniques of professional writing, literature searching, and abstracting scientific material. Designed to assist each senior project. To be taken in the first semester of the senior year.

**NTR 453. Diet Therapy.** (3) Designed to study the modifications of the normal diet in the treatment of disease. Prerequisites: Nutrition 211, 311. Two lectures and one laboratory.

**NTR 462. Honors Foods and Nutrition.** (3) Individual directed study and investigation involving techniques used in nutrition research.





**FAMILY ECONOMICS AND HOME MANAGEMENT (HMGT)**

**HMGT 320. Household Equipment. (3)** Deals with the various types of household equipment, standard brands, their selection and care, and the study of problems concerned with the manufacture, marketing and servicing of the equipment of the home.

**HMGT 321. Home Management Theory and Decision Making. (3)** A study of the management process and how it can be applied to utilize most effectively the specific resources of the individual and family. Attention is given, not only to the traditional resources—money, time and energy—but also to the interests, abilities, and decision making skills of the individual.

**HMGT 322. Economics for the Family. (3)** Principles and problems associated with production, exchange and use of wealth and their direct relation to the welfare of families.

**HMGT 401. Management for the Low-Income Family. (3)** Deals with problems of families with very low income and those receiving welfare checks; how to get the most value from food stamps and free commodities. Field trips are arranged where actual conditions can be studied.

**HMGT 422. Home Management Residence. (3)** Designed to integrate the homemaking knowledge, abilities, and skills gained from previous courses and in other ways; to develop an awareness and some understanding of the components which make up the whole of management—such as goal defining, resource allocation and decision making. Prerequisite: Home Management 321. Cannot be blocked with student teaching.

**HMGT 433. Consumer Education. (3)** Includes the consumer activities in the marketplace and the financial world. Emphasis is given to the most important areas in which students will function as consumers.

**RELATED ART (RA)**

**RA 201. Environmental Design. (2)** Creative problems in design and color with emphasis on the element and principles of art as applied to the home and individuals; two and three dimensional forms in design; varied materials and techniques. Emphasis on awareness of design. Lab-Lecture.

**RA 301. Costume Design. (2)** An analysis of historic and contemporary trends and practical problems in costume design; the art of dress as a cultural expression; basic design elements and principles applied to dress; problems to develop originality and techniques in costume design and illustration; costume rendering and layout. General Prerequisites: Related Art 201 and Clothing 211. Prerequisites for Clothing majors: Related Art 201, Clothing 203.

**RA 323. Spatial Living I. (2)** Design in home planning; study of space relationship for family living; housing (including furnishings) in relation to design and environment.

**RA 350. Studio Design Laboratory. (2)** Designed for students who experiment with art studio problems, related art problems, design inspiration and media—with guidance of instructor.

**RA 400. Spatial Living II. (2)** Historical and contemporary interiors...traditional and modern; classic Asian, European and current influences; contemporary.

**RA 411. Textile Design. (2)** Original design developed in resist and print methods using historic and contemporary techniques.

**RA 412. Art Crafts. (2)** Designing and executing art craft using inexpensive materials and tools, relationship of design to function, materials, tools and techniques; understanding educational, economic, social, recreational and therapeutic art craft work. Creative objects of original design. Lab-Lecture.

**RA 421. Interior Architecture. (3)** Problems in designing for living; integration of structural concepts; design in relation to site, house and interior environment; selection and coordination of furniture, fabrics, materials, accessories in interior space laboratory. Prerequisite: Related Art 201 and 323. Lab-Lecture.

**DEPARTMENT OF PLANT SCIENCE**  
**Kenneth J. Hillsman,**  
**Ph.D., Head**

The Department of Plant Science is designed primarily to acquaint students with the principles of Plant and Soil Science and the Conservation of the renewable natural resources. The curriculums are designed to give students a broad knowledge of the theories and principles of Agronomic and Horticultural Sciences.

The Department offers curriculums leading to a Bachelor of Science degree in Plant Science with options in Agronomy and Horticulture. The options contain adequate flexibility in course requirements to permit the structuring of a program best suited to the individual.

To satisfy the requirements for a degree in Plant Science, the student must complete a minimum of 24 credit hours in the major field, with a minimum of 10 hours in 300 and 400 level major field courses. A student is eligible for graduation when 132 semester hours have been completed with a minimum cumulative grade point average of 2.0. A student who desires to minor in Plant Science must complete a minimum of 18 semester hours in the Department.

Graduate students may pursue studies in Plant Science leading to the Master of Science degree in Agricultural Sciences. A description of these requirements can be found in the Graduate School Bulletin.

**CURRICULUM IN PLANT SCIENCE**

FRESHMAN YEAR Course & Number	Credit Hours	
	Fall	Spring
AGR 102 .....	3	
AGR 111; Mus. 131 .....	1	2
Hist. 201; 202 .....	3	3
Eng. 101; 102 .....	3	3
Math 111; 112 .....	4	3
AH 101; AGR 210 .....	3	4
P.E. or AFROTC .....	1	1
	18	16

SOPHOMORE YEAR Course & Number	Credit Hours	
	Fall	Spring
AGR 301; 202 .....	3	4
Eng. 211; 212 .....	3	3
Chem 121; 122 .....	4	4
Hrt. 200 .....		3
GPA 221; AEG 102 .....	3	3
P.E. or AFROTC .....	1	1
	14	18

**OPTION IN AGRONOMY**

The curriculum in Agronomy is designed to offer principles and experience which will prepare students for successful competition in the Agronomic Sciences and the conservation of the renewable natural resources.

Freshman and Sophomore students take courses outlined in the plant science curriculum for freshmen and sophomores.

JUNIOR YEAR Course & Number	Credit Hours	
	Fall	Spring
Eng. 300; 301 .....	3	3
AGR 311; Hrt. 360 .....	3	3
AGR 321; 322 .....	3	3
AH 311; AGR 350 .....	3	3
Chem. 360; AGR 320 .....	4	3
AGR 300 .....		3
	16	18

SENIOR YEAR Course & Number	Credit Hours	
	Fall	Spring
AGR 400; 401 .....	3	4
AGR 411; 412 .....	1	1
AGR 450; 402 .....	3	4
Hrt. 400; 340 .....	3	3
RD 301 .....	3	
Electives (300-400 levels) .....	3	4
	16	16

**OPTION IN HORTICULTURE**

All freshman and sophomore students take courses outlined in the plant science curriculum for freshmen and sophomores.

JUNIOR YEAR Course & Number	Credit Hours	
	Fall	Spring
AGR 300; HRT 340 .....	3	3
AGR 321; 322 .....	3	3
HRT 400; AGR 350 .....	3	3
HRT 360; 372 .....	3	3
AGR 320 .....		3
Chem. 360 .....	4	
Elective (300 & 400 level) .....		3
	16	18

SENIOR YEAR Course & Number	Credit Hours	
	Fall	Spring
AGR 411; 412 .....	1	1
AGR 450; 401 .....	3	4
HRT 401; 450 .....	3	3
AGR 301; 302 .....	3	3
Electives (300 & 400 levels) .....	6	5
	16	16



## COURSE DESCRIPTION

### AGRONOMY (AGR)

**AGR 102. Plant Science. (3)** A one semester, introductory course in Plant Science that exposes students to the principles of crop science, horticulture, and conservation of the renewable nature resources. Two lectures and one laboratory period per week.

**AGR 202. Soil Science. (4)** A study of the origin, structure, general nature of soil and the factors related to soil fertility, maintenance, and fertilizer practice. Three lectures and one laboratory period.

**AGR 210. General Agriculture Botany. (4)** Designed to provide a broad understanding of the fundamental facts and principles of botanical science. Three lectures and one laboratory period.

**AGR 300. Plant Physiology. (3)** Application of Plant Physiological principles to seed plants with special emphasis on photosynthesis, respiration, absorption, transpiration and nutrition.

**AGR 301. Crop Science. (3)** A general study of the distribution, culture, use and climatic adaptation of the major agronomic crop plants. Two lectures and one laboratory period.

**AGR 302. Soil and Water Conservation Engineering. (2)** A study of the factors affecting runoff and erosion. Design and layout of soil conservation practices. Two laboratory periods. Required for persons interested in Soil Conservation Service Cooperative Education.

**AGR 311. Elementary Soil Classification. (4)** An introductory study of the principles of soil classification and land judging. Required of majors in Agronomy. Prerequisites: AGR 202. Three lectures and one laboratory period.

**AGR 320. Economic Entomology. (3)** Provides a brief review of the structure, morphology, controls and the recognition of economic insects as related to agriculture. Two lectures and one laboratory period.

**AGR 321. Farm Weeds and Their Control. (3)** A one semester course work on the identification, eradication, and economic value of the important weeds of fields and pastures. Elective for any department. Two lectures and one laboratory period.

**AGR 322. Plant Pathology. (3)** A study of the diseases of the most important agricultural plants of Tennessee and the South. Emphasis on the nature of the disease, recognition and control measures. Two lectures and one laboratory period.

**AGR 350. Plant Breeding (3)** Application of genetic principles to the improvement of economic crop plants; methods and procedures of plant breeding. Two lectures and one laboratory period.

**AGR 400. Legumes and Pastures. (3)** Provides information on the important legumes. Adapted to the climate of Tennessee, and characterizes the Forage and Pasture Programs of Tennessee. Two lectures and one laboratory period.

**AGR 401. Soil and Water Conservation and Management. (4)** A study of the principles of tillage, drainage, fertilization and rotation practices as they affect the productive capacity of field soils. Three lectures and one laboratory period.

**AGR 402. Advanced Soil Fertility. (4)** A study dealing with the determination of nutrient deficiencies in soils and plants in rapid methods, and recommendations of corrective measures. Prerequisites: AGR 202, CHM 121, 122. Two lectures and one laboratory period.

**AGR 411-412. Seminar. (1-1)** Includes the discussion of current topics, lectures and demonstrations in Agronomy and related areas.

**AGR 450. Senior Project. (3)** Required of all Plant Science majors.

### HORTICULTURE (HRT)

**HRT 200. Vegetable Gardening. (3)** A basic study of the principles and practices of vegetable production. Two lectures and one laboratory period.

**HRT 201. Principles of Fruit Growing. (3)** A study of the principles and practices involved in the culture of orchard plants. Two lectures and one laboratory period.

**HRT 202. Landscape Design. (3)** An elementary course in landscape design for small properties.

**HRT 204. Ornamental Horticulture. (3)** An elementary course of principles and practices involved in the production of flowers and ornamental plants. Two lectures and one laboratory period.

**HRT 340. Propagation of Horticultural Plants. (3)** A study of the methods of propagation of horticultural plants including seedage, cuttage, and grafting of both economic and ornamental plants. Two lectures and one laboratory period.

**HRT 352. Floriculture. (3)** A course dealing with the principles underlying culture of greenhouse crops, commercial cut flowers and house plants.

**HRT 360. Forestry. (3)** A study of forest conservation and management and the relation of forestry to agriculture, including the influence of the forest on climate, stream flow and erosion. Two lectures and one laboratory period.

**HRT 372. Landscape Plants and Design. (3)** A study of landscape composition dealing with the designing of small lots, city property, public grounds and large estates. The use of ornamental plants such as trees, shrubs and flowers and their identification.

**HRT 400. Greenhouse Operation and Management. (3)** An elementary course of principles involving greenhouse site selection, types of structure, covering materials, heating and cooling systems and cultural practices for producing flowers and ornamental plants. Two lectures and one laboratory period.

**HRT 401. Growth, Development and Processing of Vegetables. (3)** A study of breeding procedures in establishing a new strain and

variety of vegetables and the processing and grading of vegetables of the market.

**HRT 452. Urban and Off-Farm Plant Science. (3)** A study involving nursery establishment and management, flowers and shrub production and marketing, the care of house plants. Two lectures and one laboratory period.

**HRT 402. Growth, Development and Processing of Fruits. (3)** A study of breeding procedures in establishing new strains and varieties of vegetables and the processing and grading of fruits for the market. Two lectures and one laboratory period.

**HRT 450. Turf Management. (3)** This course will deal with establishing lawns, soil preparation, seeding, watering, fertilization, clipping, and general management. Corrective measures in established lawns. Care of golf course greens.

**HRT 451. Floral Design. (3)** A course dealing with essentials of flower arrangement. One lecture and two laboratory periods.

**API 400.** A course involved in Bee establishment and management.

**PLS 480. Special problems. (3-8)** A course designed to give students experience in the various endeavors of Plant Science, including working in industry.

### JOB OPPORTUNITIES

The Plant Science curriculums prepare students to begin careers as Plant Scientists in business, industrial, or government related fields. Employment areas include:

#### Services

- 1) Soil Conservationists (SCS)
- 2) Soil Scientist
- 3) Plant Inspection and Quarantine Workers
- 4) Forest Service
- 5) Extension Service
- 6) County Agriculture Extension Agents
- 7) Farm and Home Administration (FHA)
- 8) Agronomist
- 9) Farm Manager

#### Research

- 1) Agriculture Research Service (USDA)
- 2) University—Research Associate
- 3) Industry
  - a) Plant Biologists
  - b) Agronomist
  - c) Equipment Development
  - d) Pesticides Development
  - e) Marketing and Processing

#### Sales

- Industry (Private Companies)
- a) Chemicals
  - b) Equipments
  - c) Fertilizers
  - d) Feeds
  - e) Seeds



Ornamental Horticulture

- 1) Nursery or Greenhouse
- 2) Florist
- 3) Garden Center Salesperson
- 4) Landscape Aid
- 5) Nursery or Greenhouse Grower
- 6) Green Keeper (Turf Manager)

DEPARTMENT OF  
RURAL  
DEVELOPMENT  
Gul M. Telwar, Ed.D.,  
Head

The Department of Rural Development offers major programs leading to the degree of Bachelor of Science in Rural Development with four options: (1) Rural Business Economics, (2) Community Resource Development, (3) Agricultural Education, and (4) Agricultural Engineering.

The major objective of the Department is to provide broad applied training for people who wish employment working with rural people or agricultural industries. The curriculum in Rural Development provides for a liberal, interdisciplinary education about rural affairs coupled with training of a problem-solving nature and in teacher education for secondary school vocational agriculture teacher certification. In addition to rural development courses students are expected to select course work in applied economics, sociology, communication, selected technical areas, and the standard University course requirements for graduation. However, because of the training goals of the Department, individual students plan their curriculum in advisory sessions with the faculty to meet their personal career goals.

The applied problem solving training in the Department is designed to provide students with skills useful in employment

in community resource development, extension, general agricultural extension, vocational agricultural teaching, community planning offices, governmental agencies such as Farmers Home Administration, the Agricultural Stabilization and Conservation Service, and the Economic Statistics and Cooperative Service, and with private companies in sales and middle management positions. Students with definite career goals in private agriculturally related businesses will be counseled to select a minor in business management and accounting.

CURRICULUM FOR A MAJOR IN  
RURAL DEVELOPMENT

FRESHMAN	Credit Hours	
	Fall	Spring
RD 111, AGEN 102 .....	1	3
RD 201, 202 .....	3	3
Math 111 .....	4	
Eng 101, 102 .....	3	3
Art 133, Mus 131 .....	2	2
PE or AFROTC .....	1	1
Electives .....	3	3
	17	15
TOTAL HOURS .....	32	

SOPHOMORE	Credit Hours	
	Fall	Spring
Sci 121, 122 .....	3	3
Eng 211, 212 .....	3	3
Hist 201, 202 .....	3	3
RD 200 .....	3	
PE or AFROTC .....	1	1
Electives .....		3
RD 301, 302 .....	3	3
	16	16
TOTAL HOURS .....	32	

JUNIOR	Credit Hours	
	Fall	Spring
AGEN 301, 302 .....	3	3
RD 311, 312 .....	3	3
RD 303, 304 .....	3	3
Electives (300-400) Option I or II .....	8	8
	17	17
TOTAL HOURS .....	34	

SENIOR	Credit Hours	
	Fall	Spring
RD 401, 402 .....	3	3
AGEN 301, RD 450 .....	3	3
RD 404 .....		3
AGEN 400, RD 403 .....	3	3
Electives (300-400) Option I or II .....	9	6
	18	18
TOTAL HOURS .....	36	

Option I & II Electives (Rural Business Economics & Community Resource Development)  
SW 320, 340, 430  
ECON 302, 307, 315  
BA 323, 326, 331  
MATH 161

Option III & IV (Required courses for Certification Agricultural Education—Agricultural Engineering)  
ED 201, 301, 387, 465, 491  
PSY 242, 312  
AGED 301, 302, 472

Option I & II—Technical Areas

- AH 101, 211, 302
- PH 201, 202
- PLS 102, 301, 320
- HRT 200, 201

COURSE OFFERING

Rural Development (RD)

RD 111. Orientation. (1) Careers in Rural Development.

RD 200. Mathematical Foundations for Statistics. A survey of elementary methods of handling and understanding data used in Economics and Statistics. Basic algebra including logarithm, proportions, exponents and radicals; matrices, degrees of freedom, permutations, probability and measures of dispersion are covered. Graphic and tabular presentation of data.

RD 201. Introduction to Rural Economics. (3) Application of principles and methods of economics to the rural economy with the emphasis on agriculture including the organization, management, marketing, and finance of rural enterprises, and evaluation of politics, programs and institutions.

RD 202. Community Development. (3) Analysis of the function, structure, practices and trends of the contemporary community.

RD 301. Agricultural Marketing. (3) An understanding of the operations of food marketing (theory of marketing) and a familiarity with many of the descriptive and factual aspects of food marketing.

RD 302. Farm Management. (4) Organizational planning and operating farm business to make the most effective use of available resources and procedures for making economic decisions.

RD 303. Rural Finance. (3) An examination of the rural credit institutions and the role of credit in the development of rural economics.

RD 304. Cooperatives. (3) A study of the history and present status of cooperatives; what they have done and tried to do for communities, their problems, finance and control.

RD 311. Introduction to Applied Statistics I. (3) Basic concepts and principles of measurements, data collection, scientific investigation, and survey design. Topics include statistical measures of central tendency and dispersions, probabilities, normal and other distributions, tests of significance, regression and correlation, analysis of variance and index numbers. Prerequisite: Six hours of college math.

RD 312. Sample Survey Theory and Techniques. (3) A practical course in conducting, analyzing, and summarizing surveys. Includes review of probability, distribution, and statistical measures; simple random sampling, stratified, systematic and cluster sampling, multiframe, objective measurement, and enumerative surveys; sampling and non-sampling errors. Questionnaire design and enumeration techniques are included. Prerequisite: RD 311.



**RD 401. Community Development.** (3) Analysis of the meaning, structure and function of community development with emphasis on the factors important in community change.

**RD 402. Community Resources, Organization and Problems.** (3) Planning and management of resources, understanding of the principles and forces of change most pertinent to community organization and problems in development of rural areas.

**RD 403. World Agricultural Development.** (3) Role of agriculture in economic development. Survey of lesser developed nations with special emphasis on Africa.

**RD 404. Experimental Design.** (3) Includes review of scientific investigation principles and statistical inference. Subjects include analysis of variance and covariance, nonparametric and analysis, multiple comparison test and experimental designs. Designs cover are randomized block, balanced block, latin square, factorial, split plot, rectangular lattice and augmented. Greater emphasis placed on logic rather than on mathematics. Prerequisite: RD 311.

**RD 450. Senior Project.** (3) A study and discussion of senior projects on which students have been working (under direction) for at least one semester.

## AGRICULTURAL EDUCATION (AGED)

**AgEd 301. Adult Education in Agriculture/Agribusiness.** (3) Administering, planning, organizing, and arranging courses and programs for adults in agriculture/agribusiness.

**AgEd 301A. Intra-Curricular and Related Activities in Agriculture Education.** (3) Planning and supervision of agricultural experience programs and youth organizations; establishing and maintenance of necessary reports and records; development and use of instructional materials; operation and use of audio and visual equipments.

**AgEd 302. Methods of Teaching and Management in Vocational Agriculture.** (3) A study of teaching methods, materials, and concepts of classroom management for teaching vocational agriculture. Emphasis will be placed on developing a program of vocational agriculture/agribusiness that will relate to a total school; agricultural business and/or industry's program.

**AgEd 302A. Methods of Teaching Agricultural Mechanics.** (3) Developing agricultural mechanics programs, application of methods, practices, and skills; study of shop layouts; equipment, organization and laboratory exercises. Two lecture—one lab.

**AgEd 472. Student Teaching in Agriculture Education.** (10) A supervised experience in teaching vocational agriculture. Offered in off-campus centers. Prospective teachers will receive experiences in all phases of the program. Prerequisite: AgEd 301, 302 or consent of the instructor.

## AGRICULTURAL ENGINEERING (AGEN)

**AgEn 102. Introduction to Agricultural Engineering.** (3) The fundamental principles of agricultural power and machinery; agricultural arc and acetylene welding; agricultural structures; soil and water conservation, and agricultural uses of electricity. One lecture—Two laboratory periods.

**AgEn 301. Agricultural Power and Equipment.** (3) Basic power units and machine elements; principles of selection, operation and maintenance of field machinery; farm materials handling and processing equipment. One lecture—Two lab periods.

**AgEn 301A. Agricultural Mechanics Shop.** (3) Shop planning and organization; bench work; agricultural carpentry, concrete and masonry; plumbing; repair and reconditioning farm machinery, and electrical equipment operation and maintenance. One lecture—two lab periods.

**AgEn 302. Rural Home Construction, Mechanics and Maintenance.** (3) Basic home construction; theories of heat, light and electricity in relation to the home, including operation, maintenance and repair of equipment. Two lecture—one lab.

**AgEn 400. Agricultural Engineering Special Problems.** (3) Supervised laboratory or field work research of a problem in agricultural engineering. Written project outline and reports of results required.

**AgEn 401. Agricultural Buildings.** (3) Planning, location, selection of material, methods and costs of construction, water systems, and sewage disposal. Two lecture—one lab.

## SCHOOL OF ALLIED HEALTH PROFESSIONS Andrew Bord, Ph.D., Dean

The School of Allied Health Professions is jointly supported and administered by Meharry Medical College and Tennessee State University. The purpose of the school is to offer educational programs designed to produce practitioners and prepare individuals who are interested in pursuing careers as educators in the health professions; to encourage, develop and support interest in research; and to provide health care, when appropriate, and continuing educational services to the community. This threefold purpose is consistent with the stated missions of both the Tennessee State University and Meharry Medical College.

The specific objectives of the School of Allied Health Professions are as follows:

1. To develop and implement educational programs designed to produce allied health practitioners and educators based upon employment demands and the availability of resources.
2. To recruit students interested in careers in the health care field in programs offered in the School and instill in these students the basic principles of morality and professional ethics. Also to provide these students with career counseling, academic advisement and tutorial assistance designed to assist them in their effort to achieve their career goals.
3. To maintain full accreditation by appropriate agencies for all programs offered by the School.
4. To recruit and maintain faculty capable of making significant contributions to the supporting institutions' basic and applied research efforts.
5. To encourage and promote the rendering of service to the community through the sponsorship of seminars, workshops, consultation and the delivery of health care whenever appropriate.
6. To identify and develop the talents of students whose prior educational and cultural disadvantage has prevented their being prepared fully to pursue an allied health career successfully without special assistance as well as to serve students who are well-prepared and talented.

The School presently offers programs in the following areas:

Dental Hygiene  
Health Care Administration and Planning  
Medical Records Administration  
Medical Technology  
Respiratory Therapy  
Speech Pathology and Audiology

Upon completion of either the associate or baccalaureate program in Dental Hygiene, or Health Care Administration and Planning, the degree will be conferred by Tennessee State University and the appropriate certificate will be awarded by Meharry Medical College. Students completing a major in Medical Technology will receive the baccalaureate degree from Tennessee State University and a certificate from the affiliate medical institution. Tennessee State University will confer the baccalaureate degree upon graduates from the programs in Medical Records Administration, Respiratory Therapy, and Speech Pathology and Audiology.



Courses that are required by all departments in the School of Allied Health for the Bachelor Degree are defined as the core curriculum. These required courses are consistent with University requirements and are considered basic to the general mission of the School of Allied Health Professions.

#### Core Courses

- English 101, 102 (6 hours)
- Literature (6 hours)
- History 201, 202 (6 hours)
- Zoology 201, 202 (8 hours)
- Physical Education 011, 012 (2 hours)
- and two additional hours of activity courses
- Speech 220 (or its equivalent by department approval) (3 hours)
- Sociology 211 (3 hours)
- Philosophy 336 (3 hours)
- Art, Music, Drama (2 hours)
- Math 111 (4 hours)
- AHP 100 (1 hour)

Additional requirements will be given through each department in Allied Health Professions. Students are responsible for their own transportation costs to off campus sites for clinical training.

## DEPARTMENT OF DENTAL HYGIENE

**Elza Chandler**  
Ed.S., Head

The dental hygienist is a licensed professional, with specialized clinical and educational skills, who performs preventive and therapeutic services under the supervision of a dentist. The primary function of the dental hygienist is to work as an integral part of the dental health care team—dentists, dental hygienists and dental assistants—in assisting individuals and groups of persons in obtaining and maintaining optimal dental health. The associated activities are concerned with the prevention and control of dental diseases and disorders.

Graduates of the Associate of Science degree program are educated to function primarily within dental offices, hospitals and clinics. Specifically, graduates with the Associate of Science degree will be able to assist dentists, polish restorations, scale, plane and polish teeth, apply topical agents, provide guidance to patients on diet and plaque control, manage patients with early signs of periodontal disease, expose, develop, mount and read radiographs, perform diagnostic tests, function

as supervisor of other dental auxiliaries, and participate in the community health care delivery system.

The Bachelor of Science degree program in Dental Hygiene was implemented during the Fall semester of 1977. The dental hygienist graduating from the Bachelor of Science degree program will be qualified to perform the same duties as the Associate of Science degreed dental hygienist. In addition, this graduate will be able to supervise other dental hygienists, perform extended duties in periodontics, serve as resource teacher in public schools, and teaching in dental hygiene programs. The baccalaureate degree may serve as a foundation for further study or as a supplement to previous study.

The Dental Hygiene Program is accredited by the Commission on Dental Accreditation of the American Dental Association. Graduates are eligible to take the National Board Dental Hygiene Examination and board examinations in all states and regions in which the graduate may wish to practice.

A recently renovated dental hygiene clinic, laboratory, and classroom are maintained in Clement Hall. Students are also assigned to various clinics within the School of Dentistry, at Meharry Medical College, as well as to health centers and other off-campus facilities.

Dental hygiene students are entitled to participate in all extra-curricular activities of both Meharry Medical College and Tennessee State University. Students have complete access to facilities and privileges of both campuses; e.g., libraries, inter-library loans from the Vanderbilt University School of Medicine Library, and other libraries within the Metropolitan Nashville Area made possible through the Public Service Department of the Meharry and the Tennessee State Libraries.

#### APPLICATIONS

Application forms for admission may be obtained from the Office of Admissions and Records at Tennessee State University. Communications regarding admissions should be addressed to that office.

All transcripts and other materials must be on file in the Office of Admissions and Records before applications are processed. Students wishing to apply for the freshman class, which begins in the Fall semester, should have all application materials on file by May 15.

Students are accepted for advanced standing, and transfer credits are granted. Requests for transfer credits and/or advanced standing are evaluated by the Department.

### ADMISSION REQUIREMENTS

#### Associate of Science Degree

Applicants for the Associate Degree must meet the general admission requirements for the University. Additional minimum requirements to be considered are:

1. A high school average of 2.5 and above on a 4.0 scale
2. One year of high school algebra
3. One year of high school biology
4. One year of high school chemistry
5. A score of 16 on the ACT, or an equivalent score on the SAT (Applicants who do not meet this criteria must have a "C+" average in biology and chemistry courses or a 16 Natural Science ACT score)
- \*6. Two letters of recommendation from science teachers describing the applicant's potential for success in the dental hygiene curriculum
7. One character recommendation
8. A brief autobiographical sketch in the applicant's handwriting
9. A complete health evaluation on the official forms provided by the Department of Dental Hygiene
10. A personal interview (Interviews may be arranged for applicants who live beyond 300 miles of the University)

\*If the applicant has had a long period of absence from an academic program, references from employers, counselors, or other community leaders who know the applicant may substitute for references from science teachers.

#### Bachelor of Science Degree

Applicants who wish to enter the Bachelor of Science degree program at the junior level must submit the following data and meet the following criteria:

1. A "C" average in clinical dental hygiene courses and a minimum overall grade point average of 2.5 on a 4.0 scale (Applicants with grade point averages higher than the minimum may be given priority in acceptance)
2. Dental hygiene national board certification
3. A state board certification before the beginning of the senior year
4. Two letters of recommendation from dental hygiene faculty persons who taught the applicant (One letter must attest to the clinical competencies of the applicant)\*\*
5. Complete college transcript(s)\*\*
6. A passport type photograph taken within the last year\*\*
7. A complete health evaluation on the official forms provided by the Department of Dental Hygiene



8. A personal interview with members of the Committee on Admissions (Interviews may be arranged for applicants who live beyond 300 miles of the University)

\*\*May not be required of recent Meharry Medical College/Tennessee State University graduates.

Acceptance to the University does not insure acceptance into the dental hygiene program. Following notification of acceptance to the University by the Office of Admissions and Records, the prospective dental hygiene applicant's admission materials will be evaluated by the Committee on Admissions of the Department of Dental Hygiene. Dental hygiene applicants will be informed of their acceptance or rejection by the Chairpersons of the Committee on Admissions. Each candidate who presents minimum requirements is evaluated competitively and is accepted, placed on the alternate list, or rejected on the basis of relative qualifications.

Should an applicant fail to meet minimum requirements for entrance into the dental hygiene program but shows potential as a dental hygienist, the Dental Hygiene Admissions Committee will advise the applicant of mechanisms for meeting the requirements.

A non-refundable deposit of \$25.00, which will apply toward the purchase of laboratory coats and caps, is required to hold a class space. Falsification of any portion of the admission data disqualifies the applicant for further consideration by the Committee on Admissions. This policy supersedes the requirements for admission already in force.

Dental Hygiene students, upon registration, pay a refundable library deposit of twenty dollars (\$20.00) and a non-refundable library usage fee of ten dollars (\$10.00) at Meharry Medical College. An orientation fee of ten dollars (\$10.00) and forty dollars (\$40.00) yearbook fee are also required. Tuition and other fees will be paid to Tennessee State University. Students wishing to obtain health care and participate in Meharry Medical College activities will pay the appropriate fees. There are instruments to be purchased for use in dental hygiene, the cost of which varies from year to year. Upon acceptance, the applicant is sent information regarding the approximate cost of supplies and instruments relating to dental hygiene course of study.

ADMISSION TO ADVANCED  
STANDING

Students must earn, in residence, a minimum of 24 of the last 30 hours offered for the Associate Degree in Dental Hygiene. The following requirements are necessary:

1. Matriculation in an accredited Dental Hygiene Program
2. Official transcripts from each school attended showing the fulfillment of entrance requirements for admission to this program
3. Satisfactory scholastic and disciplinary records from the dental hygiene program from which the applicant is withdrawing. No students are accepted whose failures have resulted in dismissal or academic probation in another dental hygiene program.
4. A statement of honorable dismissal from the Dean or Director of Dental Hygiene from the program from which the applicant is withdrawing
5. If the interval since attendance at dental hygiene has exceeded two years, the applicant may be required to take examinations as the Committee on Curriculum recommends
6. If any deficiencies exist, disposition may require
  - a. validation of credits by department chairmen
  - b. examination of credits by department chairmen
  - c. completion of certain courses not common to all dental hygiene curricula
7. Admission to advanced standing may necessitate auditing, or taking for credit, courses which the Committee on Curriculum may deem necessary to insure adequate preparation for continued dental hygiene study

RE-ADMISSION

Application for re-admission must be to the Office of Admissions and Records and must be approved by the Dental Hygiene Admissions Committee. The applicant must meet all requirements in force at the time of such application. If the interruption has exceeded two years, the applicant will be required to take examinations in courses for which credit is desired, unless otherwise advised by the Curriculum Committee. Students who have been dismissed from the Dental Hygiene program are eligible for reconsideration only under extenuating circumstances.

ADMISSION AS AN AUDITING  
STUDENT

To register as an auditor, a student must be admitted to the University and pay all appropriate fees. Requests to audit Dental Hygiene courses must be approved by the Office of the Director.

A student of the Department of Dental Hygiene may be directed by the Academic Council of Meharry Medical College to audit one or more courses.

The courses of study for the baccalaureate program conforms to that of the associate degree program for the first two years, with few exceptions. This and the Bachelor of Science curriculum are outlined below:

ASSOCIATE OF SCIENCE  
DEGREE

FRESHMAN	
Fall Semester	
Course	Credit Hours
English 101 .....	3
Zoology 201 .....	4
DH 101 .....	3
DH 101C .....	2
DH 110 .....	4
Chemistry 101 Lecture and Laboratory .....	2
	18 hours

Spring Semester	
Course	Credit Hours
English 102 .....	3
Zoology 202 .....	4
DH 102 .....	4
DH 102c .....	2
Chemistry 102 Lecture and Laboratory .....	2
DH 112 .....	2
	17 hours

Summer Session I	
Course	Credit Hours
DH 103 .....	2
Microbiology 240 .....	4
	6 hours

SOPHOMORE	
Fall Semester	
Course	Credit Hours
DH 201 .....	2
DH 201C .....	4
DH 204 .....	3
DH 205 .....	1
DH 205L .....	2
DH 210 .....	3
DH 212 .....	2
	17 hours

Spring Semester	
Course	Credit Hours
DH 202 .....	2
DH 202C .....	4
DH 211 .....	2
DH 215 .....	2
Sociology 211 .....	3
Psychology 201 .....	3
Speech 322 .....	3
	19 hours



BACHELOR OF SCIENCE  
DEGREE

Students enrolled in the baccalaureate curriculum are required to take the following courses:

JUNIOR		
Fall Semester		
Course	Credit	Hours
DH 301	1	
Dh 301C	2	
History 201	3	
DH 304	3	
PE	1	
Electives (300-400 level)	3	
		13 hours

Spring Semester		
Course	Credit	Hours
DH 305	2	
DH 313	3	
History 202	3	
Mathematics 111	4	
PE	1	
Art, Music and Drama	2	
		15 hours

SENIOR		
Fall Semester		
Course	Credit	Hours
DH 411	3	
Philosophy 336	3	
English 351 or 361	3	
PE	1	
Electives (300-400 level)	7	
		17 hours

Spring Semester		
Course	Credit	Hours
DH 450	3	
English 352 or 362	3	
PE	1	
Electives (300-400 level)	6	
		13 hours

NOTE: CURRICULUM SUBJECT TO CHANGE WITHOUT NOTICE.  
A minimum of 16 hours must be chosen from the following list of electives:

SENIOR	Credit Hours
DH 403 Expanded Functions	2
DH 404 Community Health Consultant Services	3
DH 405 Myofunctional Therapy Clinic	2
DH 406 Communications in Health Services	3
EDCI 201 History and Foundations of Education	3
EDCI 387 Curriculum Development	3
EDCI 463 Audiovisual Aids in Education	2
EDCI 490 Multicultural Education	3

Electives may also be selected from other areas such as Health Instruction and Biological Sciences. Candidates for the baccalaureate degree must satisfy University requirements in the following areas:

English (300 level)	6
Philosophy 336	3
Physical Education	4
Mathematics	4
History	6
Humanities	2
	25 hours

Upon completion of the baccalaureate program, students must have completed a minimum of 135 credit hours.

The following regulations are in addition to those of the University and apply specifically to dental hygiene students:

1. Examinations, other than mid-terms and finals, will be held at the discretion of the instructor.
2. The evaluation of a student's performance is expressed according to Tennessee State University's system.
3. Students are encouraged to remove an "I" (Incomplete) in dental hygiene and prerequisite courses by the end of the semester following the one in which the "I" was received. All "I" grades that are not removed within one calendar year, not including summer sessions, will be changed to "N.C." (no credit).
4. Recommendations for advancements are the charge of the Dental Hygiene Evaluation Committee which meets following mid-term and the final examination periods. All teachers who take part in the student's instructional program serve as members of this committee, and the program director is chairperson. This committee serves as a forum wherein instructors discuss the estimate of each student's academic standing in all subjects. Recommendations are made to the Meharry Medical College Academic Council concerning promotions and the disposition to be made of students who encounter difficulty in their studies. Departmental recognition is given for superior work.
5. Citations for outstanding performance originate with the Evaluation Committee. Generally, a qualifying student is one who has uniformly done outstanding work during a particular semester.
6. Appeal of the decision of the Academic Council is a student's privilege. A letter of appeal is addressed to the Chairman of the Academic Council at Meharry Medical College. Although faculty members may be sought for advice, an appeal to a faculty member to intervene makes the action of the Council irrevocable.
7. In order to facilitate a student's acquisition of discipline and motivation that will result in maximum professional development, students are expected to attend a minimum of 80% of their didactic classes and 100% of their clinical experiences.
8. Students are required to maintain a minimum grade point average of 2.0

for each academic year. "D" grades may be earned in all courses; however, grades less than "C" earned in major courses are not accepted toward the meeting of departmental requirements.

REQUIREMENTS FOR GRADUATION

Students must meet all requirements for graduation as set forth by Tennessee State University. All fees to Meharry Medical College must be paid. Students must have completed all academic and clinical requirements. Further, all candidates for graduation must be recommended by the faculty to the Academic Council and the Board of Trustees.

When a student files for graduation, a fee for the Dental Hygiene certificate must be paid to Meharry Medical College and the diploma fee must be paid to Tennessee State University.

PRIZES AND AWARDS

Regular students are given preference for prizes and awards. Consideration shall be on an individual basis and exceptions may be made in the cases of irregular and special students who have done outstanding work. Departmental awards are:

THE DENTAL HYGIENE DIRECTOR'S AWARD. Awarded to the graduating student who has exhibited the greatest proficiency and interest in dental health education during his/her senior year.

THE HU-FRIEDY AWARD. Awarded to the outstanding dental hygiene student in theoretical and clinical dental hygiene.

THE OLYMPIC AWARD. Awarded to the graduating student having the highest general average, above a 3.0, for the entire course in dental hygiene.

THE SIGMA PHI ALPHA DENTAL HYGIENE HONOR SOCIETY AWARD. Awarded to the electees of Omicron Chapter with the highest scholastic average above a 3.0.

THE TENNESSEE DENTAL HYGIENISTS' ASSOCIATION AWARD. Awarded to the graduating dental hygiene student who in the opinion of his/her peers best epitomizes the professional dental hygienist.

THE NASHVILLE DENTAL SUPPLY COMPANY AWARD. Awarded to the graduating student who has rendered the highest quality of direct patient services above and beyond stated minimum criteria.



**THE DENTAL HYGIENE FACULTY AWARD.** Awarded to the graduating student who had made the most overall progress during the entire course in dental hygiene.

**THE PATTERSON DENTAL SUPPLY COMPANY AWARD.** Awarded to the graduating student, who in the opinion of the faculty, best epitomizes the professional dental hygienist.

**THE CLINICAL DENTAL HYGIENE AWARD.** Awarded to the graduating student whom the faculty assesses as having demonstrated the most outstanding clinical and patient management skills.

**DENTAL HYGIENE CONVOCATION AWARD.** Presented by Omicron Chapter of the Sigma Phi Alpha Honor Society, to the second year student, who, in the opinion of the membership, exhibits the greatest promise as a professional dental hygienist. The award is to be used toward the purchase of a scientific book of the student's choice.

Students seeking the Associate of Science degree must complete the curriculum outlined for the Freshman Year, Summer Session and the Sophomore Year, for a total of seventy-seven (77) semester hours.

Students seeking the Bachelor of Science degree must complete the full four year curriculum which encompasses 135 semester hours.

## Associate of Science and Bachelor of Science

### Degree Curricula in Dental Hygiene

#### COURSE OFFERINGS

Courses which do not bear a "DH" prefix are described in the catalogue of Tennessee State University. DH 101, 102, 201 and 202 are team taught courses with content representing several disciplines. Students are required to perform satisfactorily in each specified content area within the combined courses before progressing to subsequent courses, e.g., unit in Dental Radiography, in DH 102, must be completed satisfactorily in order for the student to progress to DH 201. Courses preceded by the prefix "DH" are intended for dental hygiene majors only, except by permission of the department head and/or instructor.

**DH 101. Dental Hygiene. (3)** An introduction to basic concepts, methods, materials and techniques of dental hygiene care, including interpersonal and intraprofessional relationships, instrumentation, obtaining and recording medical and dental histories, learning and teaching preventive concepts, cariology and

typical fluoride techniques, tissue response to injury, prevention of disease transmission, utilization of basic diagnostic aids, i.e., blood pressure, heart beat, pulse, Dental Auxiliary Utilization and Ethics.

**DH 101C. Dental Hygiene Clinic. (2)** Must be taken concurrently with DH 101.

**DH 102. Dental Hygiene. (4)** A topical approach to general dentistry and specialty practice with particular emphasis on the role of auxiliaries, dental roentgenology and fundamentals of radiation hygiene, dental materials and their manipulation. Dental Auxiliary Utilization (DAU) continued application of theoretical knowledge and clinical procedures to patient care. Pre-requisites: DH 101, DH 102C, DH 110, and Zoology 201 lecture and laboratory. Zoology 202 is taken concurrently.

**DH 102C. Dental Hygiene Clinic. (2)** Must be taken concurrently with DH 102.

**DH 103. Dental Hygiene. (2)** An introduction to periodontics with emphasis on recognition of gingival and periodontal problems, their probable cause, treatment and prevention; basic first aid procedures, advanced techniques of patient education and continued application of theoretical principles to clinical dental hygiene. Pre-requisites: DH 101, DH 101C and Zoology 201 lecture and laboratory. DH 102 and DH 102C and Zoology 202 lecture and laboratory are to be taken concurrently.

**DH 110. Oral Anatomy and Physiology. (4)** Gross and microscopic anatomy of the teeth, tissues and organs of the oral cavity and related structures, musculature, innervation and blood supply and bone structure; growth and development, function of salivary glands, a study of normal function. DH 101 and DH 101C and Zoology 201 lecture and laboratory to be taken concurrently.

**DH 112. Nutrition. (2)** The study of nutrients needed for health functioning of human beings and the biochemical functions of these nutrients in the body; nutrient content of foods and its application to meal planning; special nutritional needs of infants, adolescents, pregnant women, nursing mothers and the elderly; world food problems. (Applied nutrition is given major consideration as a module in DH 201, e.g., dietary counseling for dental caries and periodontal diseases).

**DH 201. Dental Hygiene. (2)** Hospital dentistry, dental office emergencies and CPR. Pre-requisites: DH 102 and DH 102C; DH 205 lecture and laboratory are to be taken concurrently. Zoology 201, Zoology 202 and DH 112, DH 210 to be taken concurrently and DH 103.

**DH 201C. Dental Hygiene Clinic. (4)** Continued application of theoretical principles to clinical dental hygiene. Pre-requisite: DH 102, DH 201 is taken concurrently.

**DH 202. (2)** Considers Ethics and Jurisprudence, pain control, dietary counseling. Pre-requisites: DH 201 and DH 201C, DH 205 and DH 205L.

**DH 202. Clinic. (4)** Continued application of theoretical principles to clinical dental hygiene. Synthesis of the knowledge, skills and abilities required of practicing dental hygienists will be

assessed via clinical mock board and written comprehensive examinations. A 75% competency level is required on each of the examinations in order to earn a passing grade for the course.

**DH 204. Myofunctional Therapy. (3)** Designed to teach the sophomore A.S. dental hygiene students the basic knowledge and skills in myofunctional therapy in order to be able to recognize (or "diagnose"), examine, plan and describe a therapy regimen for representative patients with inappropriate oral pressure habits. The course emphasizes basic principles and concepts of anatomy and physiology of the head and neck, growth and development, basic aspects of speech, communication and behavior change strategies. Pre-requisites: Zoology 202 lecture and laboratory or may be concurrent.

**DH 205 Expanded Periodontics for the Dental Hygienists. (1)** Designed to offer aspects of periodontics which are not generally considered as traditional dental hygiene functions. Advanced instructions are offered to further enable students to recognize and label periodontal disease and to understand etiological factors. Students are taught to participate in the planning of treatment for early or minor forms of periodontal disease, to apply and remove dressings. Pre-requisite: DH 103.

**DH 205L. Expanded Periodontics Laboratory/Clinic. (2)** Practical application of DH 205. Pre-requisite: DH 103, DH 201 and DH 201C concurrently.

**DH 210. General and Oral Pathology. (3)** A study of disease and disease process; the oral manifestations of systematic disease; oral pathology with particular attention to oral cancer; cancer detection methods. Pre-requisites: DH 102 and Zoology 202 lecture and laboratory. DH 201, DH 212, DH 205 and DH 205L to be taken concurrently.

**DH 211. Community Dentistry. (2)** A survey of private and community dental health services including neighborhood health centers, health maintenance organizations, nursing homes, hospitals, clinics, the interaction of federal, state and local agencies; dental needs and demands, manpower; dental epidemiology, socio-economic factors relating to dental care; dental health education in the schools; special programs; dental insurance.

**DH 212. Pharmacology. (2)** Principles of therapeutics, the application of pharmacologic principles to dental and dental hygiene care; management of dental office emergencies with particular attention to drugs and medications used for the treatment of allergic reactions, anaphylactic shock, syncope, cardiac arrest, etc. Pre-requisites: Zoology 202 and DH 102, DH 210 and DH 201 and DH 201C or to be taken concurrently.

**DH 215. Dental Health Education Seminar. (2)** An analysis of dental health education methods and materials; evaluation of pamphlets and other printed materials; students will design and produce dental health education materials that can be used in dental offices and other settings; techniques of behavioral modification are offered as a module. Pre-requisite: DH 201 and DH 213 or to be taken concurrently.



**DH 301. Dental Hygiene.** (1) A course designed to provide the student with experiences in the management of patients through communication and behavior modification strategies. Special emphasis is placed on management of periodontally involved patients and their psychological perception of pain. Pre-requisite: Admission to Bachelor of Science degree Program is required.

**DH 301C. Dental Hygiene Clinic** (2) 6 clinic hours. Clinical application of Dh 301 Theory.

**DH 304. Inappropriate Oral Pressure Habits.** (3) The purposes of the course are to teach B.S. degree students to identify (or "diagnose"), examine, develop a treatment plan, record, carry out and evaluate therapy programs for patients with oro-facial muscle imbalances. This indepth course emphasizes basic concepts and principles of anatomy and physiology of the head and neck, growth and development, related aspects of speech, communication and behavior change strategies. Pre-requisite: Admission to the Bachelor of Science degree program is required.

**DH 305-DH405. Clinical Practicum and Seminar in Myofunctional Therapy.** (2) The B.S. student, under supervision of the Myofunctional Team, provides direct patient care in the screening, examination, data collection and reporting, diagnosing, and rendering of therapeutic services to patients who exhibit signs and symptoms of inappropriate oral pressure habits. These are elective courses for A.S. students. Pre-requisites: DH 204 or DH 304. 4 clinic/seminar hours.

**DH 313. Advanced Oral Biology and Pathology.** (3) An indepth approach to the prevention of oral disease including, in some instances, correlation with selected studies for advanced students; effects of chemotherapeutic agents or oral flora; allergic reactions; diagnosis and treatment of oral disease. Admission to the B.S. degree program is required.

**DH 403. Expanded Functions.** (2) This course has been divided into the following modules:

- (a) Advanced Clinical Periodontics. This module is designed to provide the hygienist with knowledge and skill in such advanced procedures as marking surgery points, suturing, infiltration anesthesia and administration of nitrous oxide.
- (b) Four-Handed Dentistry. The basic concepts of four-handed dentistry are covered. Students will have the opportunity to apply knowledge and skill while assisting during dental and dental hygiene procedures. Various dental instruments along with their nomenclature and use will be included.
- (c) Hospital Dentistry. This module is designed to provide an opportunity for the dental hygienists to perform competently in the hospital setting as a member of the health care team. Pre-requisite: DH 301-301C.

**DH 404. Community Health Consultant Services.** (3) The student will be gaining some practical information on how to be an effective consultant and how to conduct effective meetings and workshops.

**DH 405.** See DH 305-405 (page 12).

**DH 411. Curriculum Concepts in Dental Hygiene and Allied Health Education.** (3) Community College Philology and Organization and theories of learning are explored. Seminar (2) hours, Practicum (3) hours. Pre-requisite: Education 387 is strongly recommended.

**DH 450. Senior Project.** (3) An introduction to the research design with emphasis on the application of research techniques in the study of current dental literature. Students will be required to complete an independent senior project.



## DEPARTMENT OF HEALTH CARE ADMINISTRATION AND PLANNING

**Donald T. Watson,  
J.D., M.P.A., Director**

### GENERAL INFORMATION

In affiliation with Meharry Medical College, Tennessee State University offers an undergraduate course of study in Health Care Administration and Planning designed to prepare individuals for leadership roles in the Health Care Field. The curricular programs provided by the department are the Bachelor of Science Degree Program and the Associate of Science Degree Program.

### ADMISSION REQUIREMENTS

Students desiring to pursue either the Bachelor of Science or the Associate of Science Degree must be accepted at Tennessee State University and also by the Health Care Administration and Planning Admission Committee of Meharry Medical College. The committee will consider applications of candidates who present the following qualifications:

1. Acceptance into Tennessee State University.
2. A grade point average of at least 2.0 on a 4 point scale. Consideration will be given to relevant life of work experience when considering applicants who fall below this requirement.
3. Two letters of recommendation from persons who have known the applicant for at least two years. Time lengths will be waived in case of employer's letter of recommendation.
4. Interview on campus or by out-of-town agency named by the Admissions Committee prior to the acceptance by the Admissions Committee.
5. Evidence of having paid an application fee of \$5.00 to Tennessee State University.

### CURRICULUM AND DEGREES

The Bachelor of Science Degree at Tennessee State University provides instruction in health management, decision making and health planning. Emphasis is placed on those management and decision-making techniques which lead to efficiency in supervisory position. The Bachelor of Science Degree is awarded after a student satisfactorily completes a minimum of 129 semester hours including one summer field placement Tennessee State University will award the Associate of Science Degree after satisfactory completion of 72 semester hours of requisite course work and including one summer field placement. The curriculum is designed primarily to prepare the student to work in a health care setting, having acquired fundamental managerial concepts and skills. For the student who seeks to minor in Health Care Administration and Planning, 26 semester hours must be completed. The required courses are: HCA 201, 202, 210; Economics 211-212; Accounting 211-121, and Management 331. Courses in the Division lead to certification by Meharry Medical College and are dictated by the academic policies of the institution. Majors and minors in the division of Health Care Administration and Planning must meet the general academic requirements of the University and the certifying requirements of Meharry Medical College.



TWO YEAR CURRICULUM—  
ASSOCIATE SCIENCE DEGREE

Freshman Year		
Fall Semester		
Course No.		Credit Hrs.
Eng. 101		3
Hist. 201		3
Math. 111		4
P.E. or AFROTC		1
Soc. 211		3
HCA 201		3
AHP 100		1
TOTAL HRS.		18
Spring Semester		
Course No.		Credit Hrs.
Eng. 102		3
Hist. 202		3
Math. 112		3
P.E. or AFROTC		1
Speech 230		3
HCA 202		3
		16

Sophomore Year		
Fall Semester		
HCA 390		2
HCA 210		3
Acctg. 211		4
Econ. 211		3
MG 331		3
P.E. or AFROTC		1
TOTAL HRS.		16
Spring Semester		
MG 300		3
HCA 320 or 410		3
HCA 420		3
Acctg. 212		3
Econ. 212		3
P.E. or AFROTC		1
TOTAL HRS.		16

Summer	Course Title	Credit Hours
Course No.		
HCA 400	Field Placement Practicum	6
GRAND TOTAL HOURS		72

\*The Associate of Science Degree candidate can expect August graduation.

FOUR-YEAR CURRICULUM  
BACHELOR OF SCIENCE  
DEGREE

Freshman Year		
Fall Semester		
AHP 100		1
Math 111		4
Eng 101		3
Hist 201		3
Sci 121		4
P.E. 11		1
TOTAL HRS.		16
Spring Semester		
Math 112		3
Eng 102		3
Hist 202		3
Sci 122		4
P.E. 12		1
Speech 230		3
TOTAL HRS.		17

Sophomore Year		
Fall Semester		
Eng 211		3
GPA 211		3
Soc 211		3
HCA 201		3
P.E.		1
Econ 211		3
TOTAL HRS.		16
Spring Semester		
Eng 212		3
HCA 210		3
MG 300		3
HCA 202		3
P.E.		1
Econ 212		3
TOTAL HRS.		16

FOUR-YEAR PROGRAM

Junior Year		
Fall Semester		
HCA 310		3
Ac. 211		4
HCA 320		3
Phil 336		3
HCA 330		3
TOTAL HRS.		16
Spring Semester		
HCA 390		3
Ac. 212		4
GPA 381		3
MG 331		3
*HCA Elective		3
TOTAL HRS.		16

Summer Session		
Course No.	Course Title	Credit Hours
HCA 400	Field Placement/ Practicum	6

Senior Year		
Fall Semester		
MS 311		3
HCA 420		3
HCA Elective		3
Soc 460		3
*B.A. Elective		
MG Elective		3
TOTAL HOURS		15

Spring Semester		
HCA 460		3
HCA 410		3
HCA 490		3
*B.A. Elective		3
Art, Music, or Drama		2
TOTAL HRS.		14
GRAND TOTAL HOURS		132

\*Choose two (2) of four recommended courses.  
\*Health Care Admin. & Planning Suggestive ELECTIVES\*

Course No.	Course Title	Credit Hours
HCA 350	Cultural-Social Aspects of Hlth. Care	2
HCA 430	Environmental & Sanitary Health	2
HCA 450	Long-Term Care Administration	2
TOTAL HOURS		8

*Business Administration Electives—TSU		
QM 215	Basic Computer Science	3
QM 315	Computer Programming (COBOL)	3
MG 304	Management Science I	3
MG 403	Personnel Administration	3
TOTAL HOURS		12

\*Choose two (2) of the four recommended courses.

COURSES IN HEALTH CARE  
ADMINISTRATION AND PLANNING

**HCA 201. Introduction to Health Care Organization. (3)** Provides an overview of the American Health Care System, with emphasis on acquaintance with the many varied aspects of the entire field, including terminology, facilities, placements, and people. The subject areas include history of the development of the American Health Care System, a descriptive analysis of the various levels of health care delivery and the patient care system, exposure to financing of health, and an introduction to governmental involvement in the health care system.

**HCA 202. Introduction to Health Care Organization. (3)** Provides an overview of the more significant national and local planning activities designed to alleviate some of this country's and this area's pressing health problems. This course will focus on the origin, planning, and experience of health-related legislation and programs. Pre-requisite: HCA 201.

**HCA 210. Approaches to Planning in Health Care. (3)** The principal theories and methodologies of the planning discipline will be studied via lectures, reading, case studies, and guest lectures. The philosophical foundations of various methodologies and those of the planning process will be examined. Specific interpretation and application of comprehensive health planning legislation will be considered. Emphasis will also be given to the concepts of regionalization. This course is recommended for all those considering employment or post graduate study in planning. Pre-requisites: HCA 201, 202.

**HCA 310. Health Economics. (3)** The economics of the health care industry will be reviewed, with attention to the supply and demand for health care services. Critical issues to be examined include the economic mechanisms of the health care industry, methods of paying, cost effectiveness and benefit-cost analysis, national health insurance plans, and governmental intrusion. The economics of the present health care system will also be analyzed in its relation to the poor and minorities. Pre-requisites: HCA 201, 202; Econ. 211, 212.

**HCA 320. Seminar: Health and Facilities Law. (3)** Introduction to the specifics of health related legislation and programs, and their implications for providers and consumers of health care. The legal principles and issues for medical caseworkers, along with liability of health care facilities and staff for injuries to patients, and abuses to patient rights by the health care system will be examined. Topic areas also include malpractice suits and legislation, collection of bills, labor law, informed consent of patients to medical and surgical procedures. Pre-requisites: HCA 201, 202; Pol. Sci. 101.



**HCA 330 Sociology of Health (3)** The objectives of the course will be to examine the social and psychological implications of illness from inception to termination. Materials will be drawn from the relevant literature of the behavioral sciences that relate to health. Pre-requisite HCA 201, 202; Sociology 211, 121.

**HCA 390. Communication and Technical Writing. (2)** The special requirements and techniques for the professional report will be examined along with an analysis of the general communication skills required of the professional health administrator. Students will receive training in practical communication and grant interpretation. Also, attention will be given to the development of writing skills and the special communication needs of individual students.

**HCA 400. Field Placement (5)** The internship is designed to give the student direct experience in various health care settings. The experimental component allows the student an opportunity to apply his newly acquired normative and cognitive skills in an actual working situation. The areas from which students may choose are: hospitals, federal government agencies, long-term care facilities, intermediate care facilities, group practices, medical programs, volunteer agencies, mental health facilities, or community agencies. During the ten-week placement, the summer between the junior and senior year, students will be required to submit midterm and final reports to the Division. Pre-requisite: Senior Standing.

**HCA 410. Seminar: Critical Health Issues. (3)** The objective of the seminar will be to examine the many current issues which face the health care industry. Emphasis will be placed on a full evaluation of the gamut of issues, with particular attention being given to the issues facing minority health care delivery issues that will be investigated and discussed include health care for the poor, rising cost of health care, medical specialization, legislative impact on health care for minorities and voluntary and governmental health

**HCA 420. Health Care Management I. (3)** The application of management techniques to the administration of health care facilities will be examined. The various administrative management elements of health care—systems approach of decision making; the establishment of management objectives and techniques and the management of complex and normative organizations—will be discussed. Also, the different levels of administrative management will be discussed. Prerequisites. HCA 201, 202, 210; Econ. 101, 102, 121, 122; Acctg 211, 212, Mgmt. 201, 206.

**HCA 460. Health Care Management II. (3)** As an extension of Health Care Management I, advanced quantitative methods and statistical techniques will be studied in addition, this course will study managerial financing of health care facilities in relation to acquisition, planning and controle of funds from internal/external sources for short-term intermediate and long-term objectives issues to be examined include financial analysis, profit planning, cost-benefit analysis, and reorganization. Pre-requisites HCA 201, 202, 210, 420 Econ. 101, 102, Econ 121, 122, Acctgy. 211 212, Mgmt. 201, 206.

**HCA 490. Health Care Research. (3)** An introduction to the research design will be provided with emphasis-on application of statistical and research techniques to problems of concern to the health care system. Students will be required to carry through to completion a manageable research problem. Pre-requisites HCA 201, 202, 210, 310, 330, 320, 390, B.A. 311, Mgmt. 202.

**HEALTH CARE  
ADMINISTRATION AND PLANNING  
SUGGESTED ELECTIVES**

**HCA 350. Cultural-Social Aspect of Health Care. (2)** Discussion will center on the effects of the social and cultural milieu on the level of health of the community; the nature, accessibility and availability of health care services. Pre-requisites HCA 201, 202.

**HCA 430. Epidemiology. (2)** The objective of this course is to acquaint students with epidemiology as a scientific discipline and to facilitate student's understanding of the role of epidemiology in health service planning and administration. Emphasis will be placed on methods employed in current epidemiologic studies of chronic diseases, public health, vital statistics, environmental sanitation and communicable disease controle on a local, national, and global basis. Pre-requisites HCA 201, 202, 310.

**HCA 440. Environmental and Sanitary Health. (2)** This course will discuss the responsibilities of the administrator for providing a hygienic, safe, institutional environment, as well as the responsibility of the institution to contribute to the environmental health of the community. The course will also discuss critical environmental health issues as they relate to the overall health of the community. Pre-requisites, HCA 201, 202.

**450. Long Term Care Administration. (2)** The administrative issue of care for long-term patients will be addressed with specific discussion on the aged and primary and extended care of the aged. The peculiar social, cultural, and economic environment will be discussed as each related to accessibility and availability of health services and the aspects of administration in long-term care facilities. Prerequisites HCA 201, 202.



**DEPARTMENT OF  
MEDICAL RECORDS  
ADMINISTRATION  
Lois Jenkins, B.A.,  
R.R.A., Acting Head**

Medical Record Administrators are trained as experts in health care information systems and are responsible for designing, planning, organizing, directing and controlling medical record services. Additionally, their numerous functions are maintaining auxiliary records, including indices and registers; assisting the medical staff with completion of records, medical research projects and committee functions; supervising department staff members and interaction with other departments in solving problems. Their duties largely depend and differ according to the size and type of institution they serve.

The primary goal of the MRA program is to meet the local and state needs for MRA's to keep pace with the increasing demands in the health care field.

The demand for trained MRA's far exceeds the availability of personnel, such as hospitals, clinics, community health centers, insurance companies, local and state health departments, research centers and extended care facilities who seek professionals to take care of responsibilities involved. There is an abundance of choices of job opportunities for RRA's depending upon their particular strengths.

**ADMISSION REQUIREMENTS**

Entering Freshmen:

In addition to meeting minimum admission criteria of Tennessee State University, applicants seeking admission to the Medical Record Administration (MRA) program must meet one of the following requirements:

- 1. High school graduation with a minimum cumulative grade point average of 2.25 on a 4.0 scale.
- 2. GED test scores of 50 or above for the five subjects tested.
- 3. A minimum composite test score of 14 on the ACT. All applicants will be required to provide: Two recommendations, such as an employer, teacher, counselor, etc. Recommendations will not be accepted from relatives.



Advanced Standing  
(Transfer Students):

Applications will be accepted from transfer students from other colleges or universities, or from other Departments of Tennessee State University.

Applicants with fewer than 30 semester credit hours in courses required by this program must have an overall college grade point average of 2.25 on a 4.0 scale and meet the admission requirements for first year freshman applicants.

Applicants with 30 or more semester credit hours in courses required by the MRA program will be admitted if they have maintained an overall college grade point average of 2.25 or above on a 4.0 scale.

Transfer credits for non-major courses will be accepted according to University policies on admission with advanced standing. All transfer credits from Accredited Baccalaureate Degree programs or Accredited Associate Degree Programs in Medical Record Technology will be accepted where evidence is provided that the content of courses previously taken is essentially the same as the content of courses in this curriculum. No credit will be accepted for major field courses in which student has received a grade lower than a "C".

The Accredited Record Technician (ART) by AMRA Correspondence Course, may challenge appropriate major technology courses on approval of the director.

DEGREE REQUIREMENTS  
CURRICULUM

FRESHMAN YEAR

	Semester	
	Credit Hours	
	Fall	Spring
English 101-102 .....	3	3
Math 111-112 .....	4	3
Am. History 201-202 .....	3	3
Biology 111-112 .....	4	4
Art 133, Music 131 .....	2	2
P.E. or ROTC .....	1	1
Total Hours	17	16

SOPHOMORE YEAR

	Semester	
	Credit Hours	
	Fall	Spring
Zoology 201-202 .....	4	4
English Lit. 211-212 .....	3	3
Microbiology 240 .....	4	
Speech 230 .....		3
HCA 201-202 .....	3	3
Chem 100 .....		4
P.E. or ROTC .....	1	1
Elective .....	3	
	18	18

JUNIOR YEAR

	Semester	
	Credit Hours	
	Fall	Spring
MRA 301-302 .....	3	3
MRA 310 .....	3	
MRA 311-312 .....	3	3
MRA 312L .....		1
MRS 320-330 .....	2	1
Psy 311 .....	3	
QM 215-315 .....	3	3
Elective (Soc. Sci.) .....		3
(300-400 level)		
Total Hours	17	14

SENIOR YEAR

	Semester	
	Credit Hours	
	Fall	Spring
MRA 401-402 .....	3	3
MRA 410 .....	1	
MRA 410L .....	2	
MRA 411-412 .....	3	3
MRA 430 .....	2	
HIST 491 Afro-American History		
MRA 430L .....	1	
MRA 450 .....		2
MRA 461-462 .....	2	4
HCA 420-460 .....	3	3
Total Hours	17	15

TOTAL CURRICULUM HOURS 132

REQUIREMENTS FOR  
GRADUATION

The Medical Record Administration Program offers a Bachelor of Science degree in Medical Record Administration. The program consists of two years of general education courses covering the arts and sciences. The last two years are spent taking the professional or medical record courses. During the junior and senior years, the students complete seven semester hours of clinical affiliation in Medical Record Departments of area hospitals.

Upon successful completion of the required 132 hours included in the curriculum, the student will be eligible for a Bachelor of Science degree.

Following graduation from the program, as accredited by AMRA, the student is eligible to take the national registration examination given by the American Medical Record Association. Upon successfully passing the registration exam, the graduate becomes a Registered Record Administrator (RRA).

ACADEMIC REGULATIONS

1. Students must have a grade of "C" or better in all the major courses taken during the junior and senior years.
2. Students will be required to wear lab coats with AMRA insignia on the sleeve to identify them as students while participating in the clinical affiliations.
3. Students will be required to purchase liability insurance coverage for the

period of time they are participating in the clinical affiliations.

4. Students will be governed by the AMRA code of ethics while participating in the clinical affiliations.

MRA COURSE DESCRIPTIONS  
Medical Record Administration (MRA)

**MRA 301-302. Medical Terminology. (3-3)** Basic medical prefixes, suffixes and word roots, terminology of diseases, operations, symptomatology, pharmaceutical terms, anesthesia terms and abbreviations. (Prerequisite: Zoo 201-202 or by approval of instructor for 302 a prerequisite of 301 is required).

**MRA 310. Current Trends in Health Care Delivery. (3)** Current Trends in health care delivery; federal, state and local laws and regulations that pertain to the health care field, principles, practices and development of public health including local, state and federal programs. (Prerequisite: HCAP 201-202).

**MRA 311. Medical Record Science I. (3)** History of Medical Records; the national, state and local professional organizations, medical record personnel; medical record content; admission procedures, numbering, filing, record retention and microfilming standards of hospital accreditation and documentation of health care; relationship of the medical record administrator to the medical staff; medical staff organization and functions.

**MRA 312. Medical Record Science II. (3)** Preparation of reports and abstracts; statistical concepts; nomenclature, classification and indexing systems. (Prerequisite: Zoo 201-202, MRA 301-311).

**MRA 312L. Medical Record Science Laboratory. (1)** Supervised on campus laboratory experience in all areas covered in MRA 311 and 312. (Prerequisite: MRA 311; Corequisite: 312).

**MRA 320. Problems in Medical Record Administration. (2)** Problem-solving techniques of the supervisor; independent study and research in a specific area of need as determined by the student and instructor. Areas limited to those studied in MRA 311 and 312 (Prerequisite: HCAP 201-202, MRA 311; Corequisite or prerequisite 312).

**MRA 330. Directed Practicum I. (1)** Supervised learning experience in a health care facility. Experiences received in those areas studied in MRA 311.

**MRA 401-492. Fundamentals of Medical Science I, II. (3-3)** Disease processes affecting the human body; studies through an integrated approach of specific disease entities. (Prerequisite MRA 301-302; MCRB 240; Zoo 201-202).

**MRA 410. Medical Transcription. (1)** Organization and management of transcription units; designed to introduce the student to terminology commonly used in medical dictation; explanation and formal demonstration of medical reports and use of available references in the laboratory. (Prerequisite: MRA 301; Zoo 201-202; Pre or Corequisite MRA 302 or approval of instructor).



**MRA 410L. Medical Transcription Laboratory.** (2) Medical Transcription; integrated concepts of medical terminology, anatomy and physiology. Practical application of theory regarding transcription of medical reports and abstracting medical records. (Corequisite: MRA 401).

**MRA 411. Medical Record Science III.** (3) Legal Aspects of Medical Records and Medical Care Evaluation. (Prerequisite: MRA 311, 312; Pre or Corequisite: MRA 401-402).

**MRA 412. Medical Record Science IV.** (3) Organization and management principles as applied to administration of medical record services; principles of systems design and analysis as applied to the processing of medical record information; professional ethics; labor relations/unions; personnel administration and interpersonal relationships in a health care setting; inservice education. (Prerequisite: MRA 411; Pre or Corequisite: HCAP 420-460).

**MRA 430. Advanced Medical Record Seminar.** (2) Designed for students to explore the current issues and developments in health information systems; application of automated data processing techniques to the health field; research techniques. (Prerequisite: MRA 312, 320, 330, Pre- or Corequisite: MRA 411, 412).

**MRA 430L. Advanced Medical Record Seminar Field Trips.** (1) Field trips designed to acquaint students thoroughly with community opportunities and resources, as a guide for setting up a medical record department. (Corequisite: MRA 430).

**MRA 450. Senior Research Project.** (2) Independent research project; the topic relating to a specific aspect of medical record administration to be determined in consultation between the student and director. (Prerequisite: MRA 411 Senior classification in the Medical Record Administration program, Pre- or Corequisite MRA 412 and 462).

**MRA 461. Directed Practicum II.** (2) Supervised learning experience in a health care facility. Experiences received in those areas studied in MRA 312 and 411 (Prerequisite: MRA 330; Pre or Corequisite MRA 411).

**MRA 462. Practicum in Medical Record Administration.** (4) Students assigned to health care facilities for supervised learning experience in the administrative aspects of medical record practice, with emphasis on the administrative functions of the professional Medical Record Administrator. (Prerequisite: MRA 461, 412 and 320).

## CURRICULUM IN MEDICAL TECHNOLOGY

Medical Technology as a health profession represents the application of scientific knowledge to the performance of laboratory test. The student is taught laboratory technological aspects of medicine which involves the use of accepted clinical laboratory diagnostic methodologies.

The program jointly sponsored by Tennessee State University and Meharry Medical College, consists of three years of pre-clinical training and twelve months (three semesters) of clinical training.

The Medical Technology program is approved by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS), the Committee on Allied Health Education and Accreditation, and the State of Tennessee.

Medical Technology students are entitled to participate in all extracurricular activities of both Meharry Medical College and Tennessee State University. Students have complete access to facilities on both campuses, e.g., libraries, inter-library loans from Vanderbilt University School of Medicine and other libraries within the Metropolitan Nashville Area. This is made possible through the Public Service Department of the Meharry Medical College and Tennessee State University libraries.

### Admission Requirements

#### Entering Freshman

In addition to meeting minimum admission criteria of Tennessee State University, applicants seeking admission to the Medical Technology Program must meet one of the following requirements:

1. High school graduation with a minimum cumulative grade point average of 2.8 on a 4.0 scale.
2. GED test scores of 50 or above for the five subjects tested.
3. A minimum composite test score of 15 on the ACT.
4. Two letters of recommendation from persons who have known the applicant for at least two years. Time lengths will be waived in case of employer's letter of recommendation.
5. Interview prior to acceptance by the Admissions Committee or its designee. All applicants will be screened by the Division of Medical Technology Admission Committee.

### Transfer Student

Applicants will be accepted from transfer students from other colleges or universities or from other departments of Tennessee State University.

Applicants with fewer than 30 semester credit hours in courses required by this program must have an overall college grade point average of 2.8 on a 4.0 scale and meet the admission requirements for first year freshman applicants.

Applicants with 30 or more semester credit hours will be admitted if they have maintained an overall college grade point average of 2.8 or above on a 4.0 scale.

Transfer credits for non-major courses will be accepted according to University policies on admission with advanced standing. All transfer credits from accredited programs will be accepted where evidence is provided that the content of courses previously taken is essentially the same as the content for courses in this curriculum. No credit will be accepted for major field courses in which the student has received a grade lower than a "C+".

### Retention Policies

Any student whose overall grade point average falls below 2.8 or who earns lower than "C+" in two or more medical technology courses, will be dropped from the program.

### The Clinical Year

To qualify for admission, an applicant must show by official transcript satisfactory completion of at least three (3) full academic years of acceptable college credits and meet the admissions requirements of Meharry Medical College.

The following courses and credits form the minimal academic requirements:

1. Biological sciences-16 semester hours
2. Chemical sciences-16 semester hours

A minimal of one course acceptable for a science major in mathematics and courses in immunology and microbiology are required. Those are the minimal requirements for admission.

It is strongly recommended that courses in physics, statistics, and biochemistry be included in the curriculum. To broaden ones academic experiences electives in humanities, language and social science are suggested.

Applicants must take the Allied Health Professions Admissions test and must have a favorable interview with Meharry staff personnel or an off-campus agent recommended by the Allied Health Professions Admission Committee.

Scholastic record and credentials of each applicant are submitted to the National Accrediting Agency for Clinical Laboratory Sciences for approval before admission consideration.

For accountability, a grade of "U" (unsatisfactory) or "S" (satisfactory) will be awarded throughout the clinical year. Final grades will be awarded at the end of the clinical year in accordance with the University's 4-point grading system.



COURSES	Preclinic	
	Credit	Hours
FRESHMAN YEAR	Fall	Spring
Biology 111-112 .....	4	4
Chemistry 121-122 .....	3	3
Chemistry 121L-122L .....	1	1
Mathematics 111-112 .....	3	3
English 101-102 .....	3	3
History 201-202 .....	3	3
P.E. 11-12 .....	1	1
	18	18

SOPHOMORE YEAR		
Chemistry 311-312 .....	3	3
Chemistry 311L-312L .....	2	2
Microbiology 240 .....	4	4
Zoology 440 .....		4
Zoology 201-202 .....	2	2
Zoology 201L-202L .....	2	2
English 211-212 .....	3	3
Art and Music .....	2	2
P.E. ....	1	1
	19	23

JUNIOR YEAR		
Physics 211-212 .....	4	4
Biochemistry 341-342 .....	3	3
Biochemistry 341L-342L .....	2	2
Microbiology 420 .....	4	
Social Science .....	3	
*Introduction to Clinical Laboratory MT 440 .....		8
	16	17

			Clinic
SENIOR YEAR			
Chemistry MT 401-302-403 .....	5	5	5
Biology MT 451-452-453 .....	2	2	2
Biology MT 411-412-413 .....	4	4	4
Biology MT 432-433-434 .....	1	2	2
Chemistry MT 421-422-423 .....	1	3	3
Biology MT 471-472-472 .....	1	1	1
Biology MT 460 .....		2	
Laboratory MT 462 .....	5		
	19	19	17

\*New Course

COURSES

- MT 460. Parasitology (2)** The objective of this course is to offer the student the principles dealing with human protozoan and helminth infection. This course offers the study of the defensive mechanism, immunity and specificity of the parasites.
- MT 411-12-13. Microbiology (4,4,4)** Offers the student an introduction to the clinical aspects of bacteriology with emphasis placed on morphology and physiology of bacteria, preparation of culture media and techniques used for identification; introduction to mycology are also given; students will practice under trained supervision in a hospital laboratory.
- MT 432-33-34. Immunology/ Serology (1,2,2)** Formal lectures in this course will include immune response, antigen-antibody reactions, hypersensitivity, auto immune disease and serologic procedures.

**MT 451-52-53. Hematology (2,2,2)** The use of the microscope, methods of obtaining blood and hematological procedures are taught. Principles and procedures for performance of red and white blood counts, differentials, hemoglobin and hematocrit are stressed. In addition, the study of the anemias and their detection will be included. The principles and theories of coagulation are included in this course. Laboratory practice will be carried out in the hematology laboratory of the hospital.

**MT 471-72-73. Clinical Microscopy (1,1,1)** Urinalysis deals with the detection of various kidney disorders and/or urinary tract infections by laboratory testing.

COURSES OF INSTRUCTION

(Clinical Year)  
Only Medical Technology majors who have been accepted for the clinical year by the Division of Medical Technology Admissions Committee at Meharry Medical College will be allowed to enroll in these courses.

**MT 400. Orientation.** Scheduled at the beginning of each school year. This period is designed to acquaint the new Medical Technology student with the ethics of medical technology, the hospital laboratories and their facilities, laboratory math, division policies and basic concepts involved in laboratory testing.

**MT 421-22-23. Immunohematology. (1,3,3)** The basic principles of blood banking are taught with emphasis on importance of accuracy in laboratory testing, practical application of theory is carried out in laboratory practice by the student under technical supervision crossmatching, identification of antibodies and screening of donors are included in the training of students.



**MT 401-02-03. Clinical Chemistry. (5,5,5)** Offers the student a brief review of basic chemistry before going into the principles of clinical chemistry. Included are chemistry problems, automation, and other phases of chemistry. Laboratory practice will include practical application of this theory in a blood chemistry laboratory under trained technical supervision; students will have the opportunity to work with actual hospital patients. The miscellaneous lectures include review of the anatomy and physiology of the urinary system, body fluids and special techniques in the laboratory.

**MT 462L. Basic Techniques. (5)** Presented to familiarize the student, through participation, with the basic laboratory techniques used in the various disciplines in the area of medical technology.

**MT 440. Introduction Clinical Laboratory. (8)** This course is designed to introduce the student to laboratory medicine and clinical pathology as an aid to patient diagnosis and treatment. It includes the discussion of basic concepts, laboratory instrumentation and the performance of test procedures in laboratory mathematics, clinical chemistry, hematology, and clinical microscopy.

CURRICULUM IN  
RESPIRATORY THERAPY  
Cherryl Y. Ringgold,  
M.S., R.R.E.

The Respiratory Therapy Program qualifies graduates to assume primary care responsibilities for all respiratory modalities including responsibilities involved in supervision of respiratory technician functions. The scope of patient care that the graduates from this program will be able to provide includes, but is not limited to: intermittent positive pressure breathing (IPPB), humidity/aerosol therapy, medical gas administration, broncho-pulmonary drainage, continuous ventilation, airway management, emergency care, pulmonary function testing, cardiorespiratory rehabilitation, infection control and cardiorespiratory drug administration.

The overall goal of the baccalaureate degree program in Respiratory Therapy is to provide an educational curriculum designed to prepare students for registration by the National Board of Respiratory Therapy, expanded duty practice of respiratory therapy, and to be educators and/or supervisors in the field of respiratory therapy.

The program offers to qualified high school graduates a program leading to registration and practice of respiratory therapy that is accredited by the Joint Review Committee for Respiratory Therapy Education of the American Medical Association Council in Medical Education.



It also offers career ladder opportunities to Registered Respiratory Therapist, Certified Respiratory Therapy Technicians, on-the-job trainees, and Associate degree Respiratory Therapy graduates to become expanded duty practitioners, teachers and supervisors in respiratory therapy. This program is designed to develop and ultimately offer Continuing Education courses as needed.

### Admission Requirements

Two letters of recommendation from persons who have known the applicant for at least two years. Time lengths will be waived in case of employer's letter of recommendation.

Interview prior to acceptance by the Admissions Committee or its designee. All applicants will be screened by the Department of Respiratory Therapy Admission Committee.

### Entering Freshman

In addition to meeting minimum admission criteria of Tennessee State University, applicants seeking admission to the Respiratory Therapy Program must meet one of the following requirements:

1. High School graduation with a minimum cumulative grade point average of 2.25 on a 4.00 scale.
2. GED test scores of 50 or above for the five subjects tested.
3. A minimum composite test score of 14 on the ACT.

### Transfer Students

Applications will be accepted from transfer students from other colleges or universities, or from other departments of Tennessee State University.

Applicants with fewer than 30 semester credit hours in courses required by this program must have an overall college grade point average of 2.0 on a 4.00 scale and meet the admission requirements for entering freshman applicants.

Transfer credits for non-major courses will be accepted according to University policies on admission with advanced standing. All transfer credits from accredited programs will be accepted where evidence is provided that the content of courses previously taken is essentially the same as the content for courses in this curriculum. No credit will be accepted for major field courses in which the student has received a grade lower than a "C".

### Retention Policies

Any student whose overall grade point average falls below 2.00 or who earns lower than "C" in two or more Respiratory Therapy courses, will be dropped from the program. After one regular academic term or both summer sessions, students dropped for poor academic performance may reapply for admission to the program. Students who request readmission to the program should present to the Admissions Committee evidence of substantial change in their circumstances that could lead to improved performance in this program.

### Special Requirements

Students are required to purchase uniforms and other apparel needed during clinical learning experience.

Students are also required to purchase professional liability insurance (approximate cost \$15.00 per year). This must be done on a yearly basis.

## B.S. CURRICULUM FOR RESPIRATORY THERAPY MAJORS

### FRESHMAN YEAR

Course No.	Fall	Spring
Eng 101-102 .....	3	3
Zoo 201-202 .....	4	4
PE 11-12 .....	1	1
HIST 201-202 .....	3	3
MATH 111 .....	4	
RT 101 .....	3	
RT 104 .....		3
RT 221 .....		2
RT 232 .....		2
AHP 100 .....	1	
	19	18

### SOPHOMORE YEAR

Course No.	Fall	Spring
MUS 131/ART 133 .....	2	2
SCI 121-122 .....	3	3
SOC 201 .....	3	
MCRB 250 .....		3
PE 21-22 .....	1	1
RT 201 .....	3	
RT 203 .....	3	
RT 204 .....		3
RT 211 .....	3	
RT 212 .....		2
RT 304 .....		4
	18	18

### JUNIOR YEAR

Course No.	Fall	Spring
ENG 361-362 .....	3	3
RT 301 .....	3	
RT 302 .....		3
RT 311 .....	3	
RT 322 .....		3
ELECTIVES* .....	6	6
	15	15

### SENIOR YEAR

Course No.	Fall	Spring
RT 431 .....	3	
RT 141 .....	3	
RT 450 .....		3
ELECTIVES* .....	9	6
RT ELECTIVES .....		6
	15	15

### \*RECOMMENDED ELECTIVES

MG 301	Management Organization Theory and Behavior	3
MG 403	Personnel Administration	3
HCA 201	Introduction to Health Care Organization	3
HCA 390	Communication and Technical Writing	3
HCA 410	Seminar: Critical Health Issues	3
HCA 490	Health Care Research	3
EDCI 201	History and Foundations of Education	3
EDCI 387	Curriculum Development	3
EDCI 463	Audio-Visual Aids in Education	2
EDCI 490	Multicultural Education	3
PSY 242	Human Development and Learning	3
PSy 312	Measurement and Evaluation	3
PSy 352	Adult Psychology	3

### RESPIRATORY THERAPY ELECTIVES

RT 422	Advanced Critical Care Management	6
RT 424	Advanced Neonatal-Pediatric Respiratory Care	6
RT 426	Advanced Pulmonary Function Testing	6
RT 428	Respiratory Therapy Education Practicum	6
RT 430	Respiratory Care Services Management Practicum	6

### COURSE DESCRIPTIONS

**RT 101. Respiratory Therapy Technology. (3)** A course designed to introduce the fundamental principles of medical ethics and patient care. The course will include the development of respiratory therapy; the principles, operations, and maintenance of compressed gas sources and gas administration devices; and the use of aerosol and humidity therapy, and safe practices. Additional topics to include oxygen controlling and analyzing devices.

**RT 104. Respiratory Therapy Technology Clinical I. (3)** A supervised clinical experience focusing on the general application of patient care skills learned in RT 101.

**RT 201. Respiratory Therapy Technology II. (3)** A study of the principles of the operation and maintenance of resuscitators and monitoring devices, sterilization techniques, ventilator monitoring and pressure limited ventilators. Students will also be instructed in advanced cardiac life support.

**RT 203. Neonatal-Pediatric Respiratory Care. (3)** A study of the principles, practices and techniques utilized in the respiratory care management of the newborn and the young.

**RT 204. Respiratory Therapy Clinical Practicum II. (3)** A supervised clinical application of patient care skills developed in RT 201 including the administration of aerosolized medications, chest physiotherapy, volumetric exercises, patient charting, and therapeutic evaluation and objectives. Students will also be introduced to neonatal-pediatric respiratory care.



**RT 211. Pulmonary Function in Disease.** (3) A review of the application of respiratory therapeutic modalities in the treatment and management of medical, and pre- and post-surgical patients. Course includes etiology, recognition and management of pulmonary diseases, and an introduction to basic x-ray interpretation.

**RT 212. Respiratory Pharmacology.** (2) A course designed to present the various classification of pharmacological agents used in the treatment and management of cardio-respiratory diseases. Course includes safe handling, dispensing and administration of pharmacological agents, with emphasis on pharmacological agents used in respiratory therapeutic procedures and their effects on other agents.

**RT 221. Biomedical Electronics.** (2) Course designed to provide the student with a basic knowledge of a variety of electrical instruments used in the hospital setting. Topics will include A-C and D-C circuits, transistors, amplifiers, transducers, analog and digital systems.

**RT 232. Cardio-Pulmonary/Renal Physiology.** (2) A course which goes beyond general physiology to cover the respiratory system as it relates to ventilatory mechanics, gas transport and exchange, acid-base physiology, neurological and chemical control of respiration, fluid and electrolyte balance, ventilation and perfusion relationships.

**RT 301. Mechanical Ventilation Technology.** (3) A comprehensive course covering the principles, operation and application of devices used to provide ventilatory assistance and support. Course includes an in depth study of patient-ventilator interface, artificial airways, ventilatory failure, and physiological alterations resulting from mechanical ventilation.

**RT 302. Mechanical Ventilation Clinical Practicum.** (3) A supervised application of cognitive and decisional skills developed in RT 301, which includes the use of mechanical ventilatory assistance of the adult patient, artificial airway management, and an overview of critical life support systems.

**RT 304. Pulmonary Function Testing and Evaluation.** (4) A course designed to expose the student to pulmonary function testing, evaluation, and assessment. It includes spirometry, diffusion studies, flow volume loops, Helium dilution, Nitrogen washouts, and blood gas analysis.

**RT 311. Current Trends in Respiratory Care.** (3) A discussion and presentation of controversial topics and new trends in respiratory care. The course shall also include preparation for professional credentialing.

**RT 322. Critical Care Management.** (3) A supervised clinical practicum designed to provide performance competencies in the administration of respiratory therapy to critically ill patients.

**RT 431. Strategies for Allied Health Educators.** (3) A study of the teaching methods, curriculum, course content, and teaching aids characteristic of allied health education. All phases of allied health education including accredited training programs, in service pro-

grams, and community education will be surveyed. Special application is made to health care center departments.

**RT 441. Respiratory Therapy Management Concepts.** (3) The human dimensions of personnel, financial and material management, and planning as related to respiratory care services.

**RT 450. Senior Project.** (3) An approved independent study project.

**RT 422. Advanced Critical Care Management.** (6) An intensive didactic-clinical where the student is exposed to continuous and extensive critical care patient management.

**RT 424. Advanced Neonatal-Pediatric Respiratory Care.** (6) An intensive didactic-clinical where the student can develop exceptional skills in neo-natal-pediatric respiratory care.

**RT 426. Advanced Pulmonary Function Testing.** (6) An intensive didactic-clinical where the student can develop emphasis on methodology of diagnosis of respiratory diseases, including advance pulmonary physiology and pathology.

**RT 428. Respiratory Therapy Education Practicum.** (6) A practicum where students will student-teach under supervision in a respiratory therapy educational program or hospital continuing education program.

**RT 430. Respiratory Care Services Management Practicum.** (6) A practicum where students will be exposed to the day to day planning, scheduling, short and long range management of a respiratory care service under the supervision of the respiratory care service department manager.

## DEPARTMENT OF SPEECH PATHOLOGY AND AUDIOLOGY

**H. R. Mitchell, Ph.D.,  
Head**

The Department of Speech Pathology and Audiology in the School of Allied Health Professions offers courses of study leading to the Bachelor of Science (B.S.) degree in speech pathology and audiology. The Teacher Education Program (T.E.P.) and the non-certification option are the two curriculums presently offered. These curriculums prepare students primarily for graduate school.

The major for the B.S. degree within the T.E.P. requires, in addition to the University's general education and the school's core curriculums, a minimum of 42 semester hours in the major area. Students enrolled and admitted to the T.E.P. are required, additionally, to take 33 semester hours in the T.E.P. professional core. Non-teaching students are required to select at least one minor; with careful planning, two minors are possible.

Departmental courses are structured to provide students with background information, theories, principles, and techniques for diagnosis of and remediation of speech, hearing, and language disorders in clinical and educational facilities. The program meets the demands of undergraduate study within a broad spectrum of topics, which include studies in articulation, organic speech disorders, language and voice disorders, aural rehabilitation, clinical audiology, and diagnostic audiology with specialized courses taught within each area. The course of study emphasizes an understanding of normal communicative processes, including reception, integration, and expression. Furthermore, the undergraduate program emphasizes analyses of communicative disorders with added emphasis on techniques for correction and management.

The program supplements classroom instruction with required supervised clinical observation and practicum experiences in speech-language pathology and audiology. Students obtain clinical experience applicable toward ASHA certification. The on-campus clinic, the Speech, Hearing, and Language Development Center, provides diagnostic and therapy services to children and adults in Nashville-Davidson, and surrounding counties. Additionally, students are assigned to off-campus practicum sites for diagnostic and clinical experiences and involvement in interdisciplinary team approaches to case management.

In addition to its academic commitment, the program in speech pathology and audiology provides diagnostic and clinical services in the areas of speech, hearing, and language pathologies for the surrounding University community through prognosis, management, and correction of these communicative disorders. Joint lectures and health-care programs are also sponsored in cooperation with Vanderbilt University and Meharry Medical College. Students are allowed to acquire other clinical experiences at various day-care centers, The Veterans' Administration Hospital, and several Senior Citizens Centers in the metropolitan area.

All students entering the department will be screened to determine if they have disorders of communication. Students



who are found to have such disorders will be required to enroll in the proper therapeutic program/course for remediation. Students are urged to begin therapy during their freshman year, or as early thereafter as possible. No student will be allowed to engage in student teaching until this requirement is satisfactorily met. Students are also reminded that they are expected to show steady growth in their development of vocabulary, reading, speaking, and writing skills.

Grades of C or better are required in courses within the major. Grades falling below this acceptable minimum must be repeated.

Curriculum \*Required for a Major in Speech Pathology and Audiology—Bachelor of Science Degree

- Spth 200 Introduction of Clinical Practicum
- Spth 250 Speech and Hearing Science
- Spth 260 Phonetics
- Spth 270 Phonetics Lab (only if C or less in Spth 260)
- Spth 280 Introduction to Speech, Hearing and Language Disorders
- Spth 290 Clinical Methods in Articulation Disorders
- Spth 300 Clinical Practicum
- Spth 305 Voice and Diction
- Spth 350 Language and Speech Development of Children
- Spth 372 Identification and Appraisal of Speech and Hearing Problems
- Spth 373 Aural Rehabilitation
- Spth 374 Introduction to Audiology
- Spth 400 Supervised Clinical Practicum
- Spth 450 Senior Project
- Spth 460 Organic Speech Disorders
- Spth 470 Stuttering and Allied Disorders
- Spth 476 Language Disorders in Children

\*ALL Courses of content listed as 300 and above carry associated and required observations and/or practicum. Practicum courses, 300 and 400, require students in the Teacher Education Program to accumulate a minimum of 75 clock hours of clinical practicum prior to student teaching. These courses require non-teaching students to accumulate a minimum of 100 clock hours. ALL students are required to enroll in practicum during each semester of enrollment in the Department. Participation in practicum during the Summer Sessions is optional but encouraged.

CURRICULUM FOR A MAJOR IN SPEECH PATHOLOGY AND AUDIOLOGY (WITH TEACHER CERTIFICATION)

FRESHMAN YEAR	Credit Hours	
	Fall	Spring
ENG 101, 102 .....	3	3
HIST 201, 202 .....	3	3
ZOO 201, 202 .....	4	4
MATH 111, HLTH 151 .....	4	2
AHP 100 .....	1	
PE 11, PE 12 .....	1	1
THEA 120, Art 133 .....		
MUS 131, Phil 336 .....	2	3
	18	16

SOPHOMORE YEAR	Credit Hours	
	Fall	Spring
ENG 211, 212 .....	3	3
EDCI 201, SOC 211 .....	3	3
PSY 242, SPTH 290 .....	3	3
SPTH 350, SPTH 200 .....	3	1
SPTH 260, SPTH 305 .....	3	3
SPTH 280, SPTH 250 .....	2	3
PE PE .....	1	1
	18	17

JUNIOR YEAR	Credit Hours	
	Fall	Spring
EDCI 301, Elective* .....	3	3
EDCI 387, EDSE 337 or 335 .....	3	3
SPTH 374, SPTH 373 .....	3	3
SPTH 372, PSY 312 .....	3	3
EDSE 465, SPTH 476 .....	3	3
SPTH 300a, b .....	1	1
	16	16

SENIOR YEAR	Credit Hours	
	Fall	Spring
SPTH 450, 371 .....	3	3
SPTH 460, EDRD 324 .....	3	3
SPTH 470, EDCI 472 S & O .....	3	9
SPTH 400a .....	1	
EDSE 468 .....	3	
Electives .....	3	
	16	15

\*Select Psy. 383, or 437

CURRICULUM FOR A MAJOR IN SPEECH PATHOLOGY AND AUDIOLOGY (WITHOUT TEACHER CERTIFICATION)

FRESHMAN YEAR	Credit Hours	
	Fall	Spring
ENG 101, 102 .....	3	3
HIST 201, 202 .....	3	3
ZOO 201, 202 .....	4	4
MATH 111, HLTH 151 .....	4	2
AHP 100 .....	1	
PE 11, PE 12 .....	1	1
THEA 120, ART 133 .....		
MUS 131 or PHIL 336 .....	2	3
	18	16

SOPHOMORE YEAR	Credit Hours	
	Fall	Spring
ENG 211, 212 .....	3	3
EDCI 201, SOC 211 .....	3	3
PSY 242, SPTH 290 .....	3	3
SPTH 471, SPTH 200 .....	3	1
SPTH 260, SPTH 305 .....	3	3
SPTH 380, SPTH 250 .....	1	1
PE PE .....	1	1
	18	17

JUNIOR YEAR	Credit Hours	
	Fall	Spring
SPTH 372, 373 .....	3	3
SPTH 374, 476 .....	3	3
SPTH 300a, b .....	1	1
EDSE 465 .....	3	
EDCI 336 or 337 .....		3
Elect (300-400 level) .....	6	6
	16	16

SENIOR YEAR	Credit Hours	
	Fall	Spring
SPTH 450 .....	3	
SPTH 470 .....	3	
SPTH 460 .....	3	
SPTH 400 a, b .....	1	1
PSY 383 .....		3
PSY 437 .....		3
Elect (300-400 level) .....	6	6
	16	15

COURSE DESCRIPTIONS

**SPTH 200. Introduction to Practicum.** (1) Orientation to the clinical practicum experience. Students will be introduced to: the policies and procedures of the Speech, Hearing and Language Development Center, the organization and content of clinic files, professional report writing style, clinical session planning, and the basic skills necessary for effective client-clinician interactions.

**SPTH 250. Speech and Hearing Science.** (3) Introduction to the anatomy and physiology of the speech and hearing mechanisms. An inspection of the acoustics and perception of speech as well as the psychophysics of hearing.

**SPTH 260. Phonetics.** (3) An introductory course in phonetics, the science of speech sounds which includes acoustic, articulatory and perceptual analysis of speech sounds and transcription of American speech into the International Phonetics Alphabet. Students in Speech Pathology and Audiology are expected to acquire competency of the IPA in order to apply this knowledge in the clinical setting.

**SPTH 270. Phonetics Lab.** (1) A remedial, self paced course for the individual who needs to improve his or her skills in phonetic transcription. This course follows SPTH 260. (Only if C in 260).

**SPTH 280. Introduction to Speech, Hearing and Language Disorders.** (3) Introduces the student to the nature of and types of speech, hearing and language problems, presenting overviews of various methods used in treating or managing these disorders.

**SPTH 290. Clinical Methods in Articulation Disorders.** (3) This description diagnosis and remediation of articulation problems. Academics to be covered include: a review of physical production of speech normal developmental learning patterns of speech, various models of speech processes and theoretical bases for therapeutic procedures.

**SPTH 300 (a; b, c, d.). Supervised Clinical Practicum.** (1-4) (Junior Year-Prerequisite: (25 clock hours of clinical observation)). Application of clinical session planning skills to first direct client-contact situation, management of one therapy case with close supervision, administration of basic diagnostic tests.

**SPTH 305: Voice and Diction Improvement.** (3) Designed to present the student with an overview of the anatomical and physiological bases for and principles inherent in effective oral communication, especially as related to Articulation, Language, Voice, Rhythm, and Listening Skills—accompanied by practical exercises that will assist in the modification of the



student's speech behavior. Individualized Laboratory experiences will be arranged, when necessary, within the speech and language clinic.

**SPTH 350. Language and Speech Development of Children.** (3) This course is designed to familiarize the undergraduate student with the normal development of language and speech. Students must understand the nature and purposes of communication, the elements of the language system, the neurophysiological bases for language development, and the psychosocial perceptions about the development of speech and language.

**SPTH 371. Methods in Public School and Clinical Speech and Hearing Problems.** (3) A methods course dealing with the observation, diagnosis, management, organization and therapy for various communication disorders. This course is primarily for the student who plans to enter the public school teacher certification program.

**SPTH 372. Identification and Appraisal of Speech and Hearing Problems.** (3) This course prepares the student to administer and interpret results of various diagnostic procedures used by professionals in the areas of speech pathology and audiology. The theoretical bases for the tests will be covered and basic skills in administration of the tests will be required.

**SPTH 373. Aural Rehabilitation.** (3) History, principles and theory of speech-reading and auditory training introduction to amplifying systems including hearing aids. Discussion of comprehensive care for the hearing impaired including psychological aspects and counseling.

**SPTH 374. Introduction to Audiology.** (3) An introduction to the anatomical and psychophysical aspects of hearing. Consideration of etiology and types of hearing loss. Theory and practice of techniques of auditory assessment with emphasis on hearing screening pure tone and speech audiometry. Interpretation of test results.

**SPTH 376. Speech, Language and Voice Improvement Training.** (3) Communication aids and telesensory instruments will be utilized to train students to identify and isolate distinctive features and other characteristics of their speech, voice, language, and listening skills with opportunity to modify them through practical clinical exercises, designed by the instructor.

**SPTH 377. Identifying Communication Problems Of The Developmentally Disabled With Strategies For Remediation.** (3) Since this course is designed to acquaint the student with the various types of communication patterns found in various groups of developmentally handicapped individuals (both adults and children), the course avoids the traditional areas of stuttering and articulation, but instead stresses the patterns and functions of verbal and non-verbal communication, in their impact on adaptive life skills and social interactions. The course progresses to intervention strategies and remediation tactics often used for the different types of communication disorders, with a stress on the consideration of the dysfunction and its remediation in daily living experiences.

**SPTH 400 (a, b, c, d). Supervised Clinical Practicum (1-4).** (Senior Year-Prerequisite SPTH 300 a, b (1) Management of two or more therapy cases with supervision. Demonstration of increased skill in diagnosis, management, treatment, evaluation, and report writing skills.

**SPTH 450. Senior Project.** (3) An advanced composition or special project conducted by the graduating senior to acquire and demonstrate basic principles of research or investigation. The student is supervised by a member of the faculty.

**SPTH 460. Organic Speech Disorders.** (3) The nature of disorders of speech in which structural alteration is an important contributing cause. Includes the study of neurological disorders (cerebral palsy and aphasia), cleft palate, laryngectomy (esophageal speech), and disorders of voice in which structural alteration can be either demonstrated or inferred.

**SPTH 470. Stuttering and Allied Disorders.** (3) This course is designed to provide the student with the theoretical and historical background of stuttering and its allied disorders. The student will be exposed to traditional, current and new methods or techniques for diagnosing, treating, and counseling the stutterer and members of his family and environment.

**SPTH 473. Special Problems in Speech Pathology or Audiology.** (2) Seminar study of some selected problems in speech pathology/audiology. Prerequisite: 21 hours in the major field.

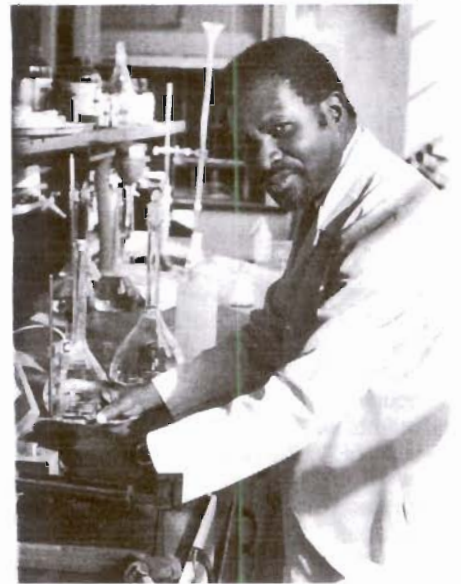
**SPTH 476. Language Disorders in Children** (3) The nature of language disturbances resulting from damage to the central nervous system, auditory impairment, environmental, social, and psychogenic influences. Managerial procedures are discussed and delineated while numerous diagnostic tests of language are demonstrated.

**SPTH 477. Alternatives for the Severely Speech, Hearing, and Language Impaired.** (3) A course designed to provide an overview of recent developments of non-vocal communication systems and other telesensory electronic devices and instruments—as well as an understanding of the potentials that may be realized through use of special techniques, communication aids, and other technological developments for the physically disabled child or adult.

**SPTH 478. Non Verbal Communication System.** (3) This course is designed to introduce the student to the various sign language systems with an opportunity to learn one or more techniques for communicating with specific groups, including the deaf, mentally retarded, physically disabled and other special populations which may need a non-vocal communication system.

**SPTH 479. Communication Problems of the Elderly.** (3) This course is designed to teach students how to identify, diagnose, treat, and manage communication problems associated with the aged. Special attention will focus on speech, hearing, language, voice, fluency problems, commonly seen among the elderly. Various diseases, medications, social conditions, biological, sociological and psychological

factors will be studied to isolate their influencing properties.





# SCHOOL OF ARTS AND SCIENCES

## Robert J. Hudson, Ph.D., Dean

### Purpose

In keeping with the purpose of the University, that of the School of Arts and Sciences is twofold: liberal and technical. The courses which comprise the School's curriculum are offered by its fourteen departments within its two Divisions. The Division of Arts consists of the Departments of Art, Communication, English, History and Geography, Modern Foreign Languages, Music, and Philosophy and Religious Studies. The Departments of Biological Sciences, Chemistry, Criminal Justice, Government and Public Affairs, Physics and Mathematics, Social Welfare, and Sociology comprise the Division of Sciences.

Due to the breadth and fundamental nature of its curriculum coupled with the necessity for the student to acquire a reasonable mastery of a single field, the School of Arts and Sciences provides a basic undergraduate education for those students planning (1) to continue in graduate study, (2) to enter the professions, or (3) to engage, upon graduation, in other gainful occupations of American life.

Through the School of Arts and Sciences, the University grants four baccalaureate degrees: The Bachelor of Arts, the Bachelor of Science, the Bachelor of Arts in Arts and Sciences, and the Bachelor of Science in Arts and Sciences. The requirements for either of these degrees are normally satisfied in four years.

### THE BACHELOR OF ARTS AND THE BACHELOR OF SCIENCE

Two undergraduate programs are offered, each leading to the Bachelor's degree. One program prepares the student for the teaching profession (certification); the second, for professions other than teaching (non-certification). The departments

offering teacher certification curricula are: Art, Biological Sciences, Chemistry, Communication, English, Government and Public Affairs, History and Geography, Modern Foreign Languages, Music, Physics and Mathematics, and Sociology.

Several departments offer training for professions other than teaching. The purpose of these pre-professional curricula is to train students for successful performance as specialists in somewhat restricted fields such as pre-medicine, pre-dentistry, social work, or law enforcement. In either the certification or non-certification programs, the student must meet the University requirements described on pages 52-54 in addition to completing a major in one discipline and other courses outlined by the particular department. These are listed with the departmental courses offering.

### THE BACHELOR OF ARTS OR SCIENCE IN ARTS AND SCIENCES

The curricula leading to these degrees are referred to as the general degree program. This program permits students to specialize in one area by electing a concentration, but also encourages them, by working with an adviser, to design a course of study to reflect their special interests and unique professional goals.

Thus, the core requirements provide a foundation for a broad general education, while a minimum of required courses at the junior and senior level fosters the combination of disciplines not traditionally associated with each other. Adult students may find the general program well-suited to the enhancement of their proficiency while they acquire the knowledge and skills necessary for an alternative career.

The general program, leading to either a Bachelor of Arts or a Bachelor of Science degree in Arts and Sciences, is the only degree program available at Tennessee State University with concentrations in the fields listed below:

- Anthropology (Dept. of Sociology)
- Art
- Studio Art
- Communications Design
- Computer Science (Dept. of Physics-Mathematics)
- English-Journalism
- Geology (Dept. of Physics-Mathematics)
- Gerontology (Dept. of Social Welfare)
- Philosophy
- Pre-Pharmacy (Dept. of Biological Sciences)

These nine programs are described, each under its own special heading, elsewhere in this section of the catalog.

All of the fields in which a student may earn a degree in the general program are cited under the three broad headings of Humanities, Natural Sciences, and Social Sciences.

### HUMANITIES

The Humanities introduce the student to a broad range of questions and ideas focusing on man as a being with moral, historical, creative and philosophical interests. Disciplines include art, music, history, philosophy, English, journalism, religious studies, speech, and foreign languages, which include French, German, Russian and Spanish.

The student in Humanities may prepare for advanced study, develop creative skills, or use this knowledge in a wide variety of careers.

### NATURAL SCIENCES

The Natural Sciences offer formal study in the disciplines of biology, chemistry, computer science, geology, mathematics and physics. Lower division courses are offered in astronomy. Preprofessional curricula preparing the student for studies in pharmacy, dentistry and medicine are also offered.

A Natural Science education enhances a student's awareness of the natural environment and prepares the student to engage in logical thought processes. Such an education also readies the student for further studies in chosen scientific and professional fields.



## SOCIAL SCIENCES

The Social Sciences offer formal study in the disciplines of anthropology, economics, geography, gerontology, government and public affairs, psychology and sociology.

The function of the Social Sciences is to provide students with a disciplined approach to both the theories and methodologies which will assist them in understanding man in society and culture.

Courses are intended for students who will pursue graduate study and for those who are preparing for professional careers in government, business, and law. The overall objective is to assist students in gaining a clearer understanding of the relevance between the social sciences and significant social issues in contemporary society.

## SUMMARY OF REQUIREMENTS FOR A GENERAL DEGREE

1. A minimum of 128 hours is required for graduation. Credit for courses in military science and physical education are excluded in arriving at this total.
2. A minimum of 60 upper division hours must be completed.
3. A minimum of 32 upper division hours must be completed in Arts and Sciences.
  - a. Twenty-four upper division hours must be completed in one of the three broad areas of Humanities, Natural Sciences, or Social Sciences; 16 of these must be in a single discipline.
  - b. Nine upper division hours must be completed in a second discipline, which may be in any area of concentration.
4. At least 12 upper division hours in the area of concentration must be taken at TSU.
5. A 2.0 grade average must be maintained in the area of concentration.

## GENERAL DEGREE CORE REQUIREMENTS (B.A.)

- I. Humanities (36 hours)
  - A. Literature and languages: 26 hours
    1. Composition: 6 hours.

English 101-102 or 101H-102H. (Students with an average of B or above in English 101-102 taken at this University may

substitute (a) courses in English or American literature at the 300 or 400 level for all or any part of the sophomore sequence of (b) 9 hours in foreign literature at the 300 or 400 level. All first-year students must enroll in Eng. 101 during the first semester of their registration and must continue in succeeding terms to take Freshman English until the requirement is met.)

2. Foreign Language: 14 hours  
Completion of one foreign language through the intermediate (200) level, either by taking and passing satisfactorily the introductory and intermediate sequences or by passing with a grade of "B" written and oral proficiency tests covering this material. Students having an exceptional high school or other background in a foreign language may be accorded advanced placement and, therefore, may not be required to take the entire 14 hours.
3. Literature: 6 hours
  - a. English 211A—212D, 211-212H, or 213.
  - b. Students with an average of B or above in English 101-102 taken at this University may substitute any 6 hours of upper division work in either English literature or foreign language literature.

- B. History: 6 hours  
Any combination selected from History 201-202 (201-202H).
- C. Philosophy and the Arts: 6 hours  
Any combination of lower division work in Art, Music, Philosophy (except Philosophy 250-251), Religious Studies, or Speech.

### II. Mathematics and Natural Sciences (11 or 12 hours)

- A. Rational Thought: 3 or 4 hours  
Either Mathematics 111 or Mathematics 261 or Philosophy 250 (Logic).
- B. Natural Sciences: 8 hours  
Select one of the following options:  
Biology 105-106  
Zoology 201-202  
Astronomy 111-112  
Chemistry 121H-122H, 121HL-122HL  
Geology 101-102  
Physics 131-132  
Physics 211-212

- III. Social Sciences (12 hours)  
Any 12 lower division hours, with a maximum of 6 from any one discipline.

## GENERAL DEGREE REQUIREMENTS (B.S.)

### I. Humanities: 24 hours

- A. English: 12 hours. English 101-102 or 101-102H (in sequence) and two courses from 211A-212D, 211-212H, or 213.  
Students with an average of B or above in English 101-102 taken at this University may substitute (a) courses in English in American literature at the 300 or 400 level for all or any part of the sophomore sequence or (b) 9 hours in foreign literature at the 300 or 400 level. (All first-year students must continue in succeeding semesters to take Freshman English until the remaining requirement is met.)
- B. History: 6 hours selected from History 201-202 (201-202H)—any combination is acceptable—should be taken during the freshman year.
- C. Additional Humanities: 6 hours  
Either (1) One foreign language sequence of 6 hours or (2) Lower division courses selected from the disciplines of Art, Journalism, Music, Philosophy, Religious Studies, or Speech to total six hours.

### II. Natural Sciences (32 or 33 hours)

- A. Mathematics: 8 hours. Math 111, 113 or Math 261-262
- B. Biological Sciences: 8 hours  
Select one of the following options:  
Biology 105-106  
Zoology 201-202
- C. Physical Sciences: 8 hours  
Select one of the following options:  
Astronomy 111-112  
Chemistry 121H-122H, 121HL-122HL  
Geology 101-102  
Physics 131-132 and 231-232  
Physics 211-212

- III. Social Sciences (12 hours) any 12 lower division hours, with a maximum of six from any one discipline.





**DEPARTMENT OF  
ART**  
**Herman Beasley, Ed.D.,  
Head**

The Art Department offers a major in Art leading to the degrees of Bachelor of Art and Bachelor of Science. The department also offers a minor in Art, the curriculum of which is listed below.

The minimum number of semester hours required for the Bachelor of Science Degree in Art is 132. The minimum number of semester hours required for the Bachelor of Arts Degree in Art is 133. The minimum number of semester hours in Art required is 57, 45 hours of which must be on the 300 and 400 levels.

1. Art Majors should earn at least a grade of "C" in courses taken in the department, otherwise the course in question must be repeated.
2. Art majors may be required to repeat any of the supporting courses in which a grade of "D" has been received.
3. Art majors who show evidence of fundamental weaknesses in an area of study may be requested by the head of the department, to take additional course work in the area.
4. A transfer student is expected to present a comprehensive portfolio of his/her work.
5. Art majors are expected to keep comprehensive portfolios of their work to be inspected periodically.
6. The department reserves the right to retain at least one example of the student's creative work in a given course.
7. All persons pursuing an organized program of study in the department are expected to participate in the program of the Art Guild.

**CURRICULUM FOR BACHELOR OF  
SCIENCE IN ART WITH EMPHASIS  
IN ART EDUCATION**

FRESHMAN YEAR	Credit Hours	
	Fall	Spring
English 101-102 .....	3	3
Art 100 .....	1	
Art 101-132 .....	3	3
Art 121-122 .....	3	3
Math. 111 .....		4
History 201-202 .....	3	3
Music 131 .....	2	
PE or AFROTC .....	1	1
	16	17

SOPHOMORE YEAR	Credit Hours	
	Fall	Spring
English 211-212 .....	3	3
Sci. 121-122 .....	3	3
Psy. 242 .....		3
Educ. 201 .....	3	
Art 211-231 .....	3	3
Soc. Sci. (Any level) .....	3	
Phil. 201 .....		3
PE or AFROTC .....	1	1
	16	16

JUNIOR YEAR	Credit Hours	
	Fall	Spring
Psy. 312 .....	3	
Ed. 301-387 .....	3	3
Art 301-302 .....	3	3
Art 331-332 .....	3	3
Art 350-351 .....	3	3
Art 341-342 .....	3	3
Art 360 .....		3
	18	18

SENIOR YEAR	Credit Hours	
	Fall	Spring
Art 326 .....	3	
Ed. 465 .....	3	
Ed. 491 .....		3
Art 434 .....	3	
Art 450 .....	3	
Art 371 .....		3
Art Elective (any level) .....	3	
Art 400, 401 or 402 .....	3	
Ed. 472 .....		9
	18	15

A minor in Art consists of 18 semester hours of art, including courses in Art 101 (3) hours; 121 (3); 331 (3); 332 (3) and 360 (3). An elective is to be selected from Art 350, 221 or 301.

**THE BACHELOR OF SCIENCE  
DEGREE WITH EMPHASIS IN ART  
EDUCATION**

The Art Curriculum with emphasis on Art Education has the following objectives: (1) to prepare the student to teach art on the elementary and secondary level; (2) to offer courses which stimulate students to learn about art and express themselves creatively as a part of their cultural growth; (3) to guide students in the understanding of the importance of art experiences in public school education, and life in general; (4) to guide students in the realization of the many ways that art affects their daily living; (5) to acquaint students with the arts of all people through assigned reading, observation and visual aids; (6) to show the relationship of art to other fields of learning; (7) to counsel and encourage students who show interest and ability for artistic growth to continue the study of art in its various forms so as to be instrumental in placing art education in the public school curriculum on a level with other school subjects.

**THE BACHELOR OF SCIENCE  
DEGREE WITH EMPHASIS IN  
STUDIO ART, COMMUNICATION  
DESIGN/COMMERCIAL ARTS, AND  
ART HISTORY**

The Art curriculum, with emphasis on Studio Art, Commercial Art/Communication Design and Art History: (1) prepares the student for advanced graduate study in a studio discipline of interest; (2) prepares and strengthens the student's skills for professional work in the arts; (3) prepares the student as a graphic designer/commercial artist; and (4) prepares the student with the necessary foundation that will enable him to broaden his knowledge in the field of Art History and Criticism through further study and/or practice.

Eighty-two hours of art courses including:

- a. Orientation, Introduction to Art, Basic Design, Drawing I-11, Drawing & Pictorial Design I-II, Painting I-II, Ceramics I-II, Printmaking I-II, Aesthetics, Senior Seminar.
- b. Six semester hours of individual problems
- c. Eighteen semester hours in major area of concentration. Students with emphasis in Communication Design/Commercial Art, twenty-four semesters needed in area of concentration.

Areas of concentration in Studio Art are Printmaking, Ceramics, Painting, Sculpture or Art History, Photography.



**CURRICULUM FOR A BACHELOR OF SCIENCE IN ART WITH EMPHASIS IN STUDIO ART**

FRESHMAN YEAR	Credit Hours	
	Fall	Spring
English 101-102 .....	3	3
Math III .....		4
History 201-202 .....	3	3
Music 131 .....	2	
Art 100 .....	1	
Art 101-132 .....	3	3
Art 121-122 .....	3	3
PE or AERO .....	1	1
	16	17

SOPHOMORE YEAR	Credit Hours	
	Fall	Spring
English 211-212 .....	3	3
Soc. Sci. elective (Lower Division) .....	3	
Art 210-220 .....	3	3
Art 211-231 .....	3	3
Art Elective .....		3
Elective .....	3	
PE or AERO .....	1	1
Art 331 .....		3
	16	16

JUNIOR YEAR	Credit Hours	
	Fall	Spring
Art 301-302 .....	3	3
Art 321 or 333 .....	3	
Art 332-434 .....	3	3
Art 341-342 .....	3	3
Art 350-351 .....	3	3
Art 326 .....		3
Phil. 201 .....	3	
Elective (any level) .....		3
	18	18

SENIOR YEAR	Credit Hours	
	Fall	Spring
Bio. or Phys. Sci. (any level)	3	3
Art Hist. elective (300-400 level) .....	3	
Art 400, 401 or 402 (Major emphasis) .....	3	3
Art 450 .....	3	
Art Electives (300-400 level)	3	
Art Electives (300-400 level)		6
Electives (300-400 level) .....	3	3
	18	15

**THE BACHELOR OF ARTS DEGREE WITH EMPHASIS IN PRINTMAKING, CERAMICS, PAINTING, SCULPTURE OR ART HISTORY**

This program in the Department of Art is designed to prepare students to perform competently in the business world and to cope with the complex problems of graduate school. The specific program goals are:

- 1. To provide students with an understanding of Commercial Art.
- 2. To provide training in modern business as related to Commercial Art.
- 3. To prepare students for graduate work.
- 4. To educate students for the teaching of Art on the collegiate levels.
- 5. To provide students with a sound foundation for successful competition in the art world.

**CURRICULUM FOR A BACHELOR OF ARTS IN ART WITH EMPHASIS IN STUDIO ART**

FRESHMAN YEAR	Credit Hours	
	Fall	Spring
English 101-102 .....	3	3
Art 100 .....	1	
Art 101-132 .....	3	3
Art 121-122 .....	3	3
Music 131 .....	2	
History 201 .....		3
Foreign Language 101-102 ....	4	4
PE or AERO .....	1	1
	17	17

SOPHOMORE YEAR	Credit Hours	
	Fall	Spring
English 211-212 .....	3	3
History 202 .....	3	
Math. III .....		4
Foreign Language 201-202 ....	3	3
Art 210-220 .....	3	3
Art 221-231 .....	3	3
PE or AERO .....	1	1
	16	17

JUNIOR YEAR	Credit Hours	
	Fall	Spring
Social Science Elective (lower division) .....		3
Phil. 201 .....	3	
Art 301-302 .....	3	3
Art 321-333 .....	3	
Art 341-342 .....	3	3
Art 350-351 .....	3	3
Art 326 .....		3
Art 331-332 .....	3	3
	18	18

SENIOR YEAR	Credit Hours	
	Fall	Spring
Biol. or Phys. Sci. (any level)	3	3
Art 434 .....	3	
Art 450 .....	3	
Art 400, 401 or 402 (Major Emphasis) .....	3	3
Art electives (300 or 400) .....	3	6
Electives (300-400) .....		3-6
	15	15-18





# DEPARTMENT OF ART

## COURSE OFFERINGS

**Art 101. Orientation to Art. (1)** An orientation course designed to acquaint freshmen and new students with the department curriculum offerings, requirements, studio discipline, and general study habit of art majors.

**Art 101. Introduction to Art. (3)** An introduction to the fundamental principles of the visual arts with stress on appreciation and the significance of art in contemporary life.

**Art 110. Introductory Studio Course I. (3)** Two dimensional design and color theory; interpretative drawing, object and figure; three dimensional design.

**Art 120. Introductory Studio Course II. (3)** Two dimensional design and color theory; interpretative drawing, object and figure, three dimensional design.

**Art 121. Fundamentals of Drawing I. (3)** An introduction to various tools techniques and materials of basic drawing. A study of perspective and function of the visual elements of composition.

**Art 122. Figure Drawing II. (3)** An exploration of formal and expressive potentials of the figure. Traditional and experimental approaches to drawing. Prerequisite: Art 121.

**Art 132. Design. (3)** A contemporary approach to basic visual elements in design as they are related to two and three dimensional problems. Problem-solving, problem-solving will be a vital part of three-dimensional form organization; with emphasis on individual creative and expression in design theory and innovation in the use of materials and techniques. Lettering techniques will be included in so far as it relates to design.

**Art 133. Art Appreciation. (2)** A course for all students interested in understanding the visual arts in everyday experiences. An introductory survey of the visual arts dealing with fundamental and historical fragmentations of Eastern and Western civilizations.

**Art 133H. Honors Art Appreciation (2).** A comprehensive survey of the art of prehistoric, Egypt, Greece, Rome, and the Romanesque and Gothic periods; the art of the Renaissance, Baroque and Rococo periods. Emphasis on comparing these periods historically as well as stylistically.

**Art 171. Introduction to Art History I. (3)** Prehistoric through the Renaissance.

**Art 172. Introduction to Art History II. (3)** Composition, stressing figure and environmental situation. Prerequisite: Art 110-120, or 121-122, 132.

**Art 210. Drawing and Pictorial Design I. (3)** Composition stressing figure and environmental situation. Prerequisite: Art 110-120, or 121-122, 132, 210.

**Art 220. Drawing and Pictorial Design II. (3)** Composition, stressing figure and environmental situation. Prerequisite: Art 110-220 or 121, 122, 132, 210.

**Art 221. Introductory Oil Painting I. (3)** The nature of modern techniques and their versatility in the use of oil and acrylics. Prerequisite: Art 110-120 or 121-122, 132.

**Art 231. Introductory Oil Painting II. (3)** The nature of modern techniques and their versatility in the use of oil and acrylics. Prerequisite: Art 110-120, or 121-122, 132, 221.

**Art 240. History of Film. (3)** An historical study of the development of film as an art medium.

**Art 241. Crafts. (3)** An introduction to the processes, materials and techniques available to the artist-craftsman in designing Two and Three Dimensional art forms in clay, fibers, and metals. Emphasis is on development of functional/non-functional forms, as well as, artistic expression.

**Art 251. Lettering. (3)** Technique of letter indication, finished lettering, letter design, typography and film lettering, usage and adaptation of lettering skills to practical problems. Prerequisite Art 110 or 132.

**Art 252. Layout. (3)** Preparation of roughs and comps, emphasis on skills as well as taste in design. Principle basics stressed, such as composition and perspective. Prerequisite: Art 110-120 or 121-122, 132.

**Art 253. Illustration. (3)** Study of pictorial design as used by the graphic designer/commercial artist. All media including photography.

**Art 300. Aesthetics. (3)** Problems in the philosophy of art and art criticism; aesthetic experience, truth and art; aesthetic value. Prerequisite: Previous art or philosophy courses.

**Art 301. Ceramics I. (3)** An introductory course in pottery making including designing, hand forming, decorating and firing ceramic objects.

**Art 301N Ceramics I. (3)** An introductory course in pottery making for non-majors.

**Art 302 Ceramics II. (3)** Experiences in designing, forming, decorating, firing, and glazing functional and non-functional forms with emphasis on wheel throwing techniques. Prerequisite: Art 301.

**Art 310. Advanced Drawing and Pictorial Design I. (3)** Advanced compositions, stressing figure. Prerequisite: Art 210-220 or consent of instructor.

**Art 311. Graphic Design. (3)** Emphasis on creative advertising problem-solving within an area of printed materials. Prerequisite: Art 251-252.

**Art 312. Production. (3)** Technology and skills necessary to the designer/commercial artist. Printed technology, preparation of finished art suitable for reproduction. Prerequisite: Art 251-252.

**Art 313. Advanced Illustration. (3)** Study of advanced pictorial concepts, methods and techniques. Prerequisite: Art 253.

**Art 320. Advanced Drawing and Pictorial Design II. (3)** Advanced compositions stressing figure. Prerequisite: Art 310 or consent of instructor.

**Art 321. Intermediate Oil Painting I. (3)** Further study of modern techniques in oil and acrylics. Prerequisite: Art 221 or consent of the instructor.

**Art 322. Intermediate Oil Painting II. (3)** Advance development in various, painting media and techniques with emphasis on oils and acrylics. Individual selection of content encouraged. Prerequisite: Art 321 or consent of the instructor.

**Art 323. Advanced Oil Painting. (3)** Advanced study and original projects in oil.

**Art 326. Photography. (3)** The fundamentals of photographic process, including the proper use and maintenance of the camera, photographic enlarger and related equipment.

**Art 330. Watercolor Painting. (3)** Composition in transparent and opaque watercolor.

**Art 331. Art History I. (3)** An introductory survey of the development of the visual arts from Pre-historic through the Early Medieval era.

**Art 332. Art History II. (3)** An introductory survey of the development of the visual arts from Romanesque Art through the Baroque in France in England.

**Art 333. Watercolor Painting I. (3)** Composition in transparent and opaque watercolor. Prerequisite: Art 110-120 or 121, 122, 132 or consent of the instructor.

**Art 334. Watercolor Painting II. (3)** Composition in transparent and opaque watercolor. Prerequisite: Art 221 or 333.

**Art 341. Sculpture I. (3)** An introduction to the tools and techniques of indirect sculpture, with emphasis on modeling, mold-making and casting. Prerequisite: Art 132 or 110-120.

**Art 342. Sculpture II. (3)** Experimentation with the various tools and techniques of direct sculpture, with emphasis on working directly in clay, plaster, wood, stone, plastic, fiberglass and metal. Prerequisite: Art 341.

**Art 350. Printmaking I. (3)** An introductory course in the art of printmaking, its history, methods, and techniques, including a comprehensive study of various printmaking processes: Intaglio (etching, drypoint, engraving), Planographic (lithography), Relief (block-cuts), Stencil (Serigraphy), and Calligraphy.

**Art 351. Printmaking II. (3)** An intermediate printmaking course, with emphasis on professional development of various printmaking processes, with emphasis on lithography, photo-silkscreening, photo-etching, and calligraphy. Work completed in this course should qualify as part of senior exhibition. Prerequisite: Art 350.



**Art 352. Advanced Printmaking I. (3)** In depth work in any chosen medium including combinations of media.

**Art 353. Advanced Printmaking II. (3)**

**Art 360. Public School Art. (3)** A survey of various education theories and problems encountered on the elementary and secondary levels. Reading, discussions, and studio experiences.

**Art 371. Art Education (Methods). (3)** To give students experience and understanding in methods, materials and media as they relate to the art program in grades level, 1-12.

**Art 372. History of Twentieth-century painting. (3)** Europe and America

**Art 373. History of Modern Sculpture (3)** Sculpture in Europe and America during the nineteenth and twentieth centuries.

**Art 375 History of Classical Art. (3)** The art of ancient Greece and Rome.

**Art 381. History of American Art. (3)** Art from the Colonial Period to the present day.

**Art 400. Individual Problems. (3)** Upper division students only and permission of instructor.

**Art 401. Individual Problems. (3)** Upper division students only and permission of instructor.

**Art 402. Individual Problems. (3)** Upper division students only and permission of instructor.

**Art 411. Three Dimensional Design. (3)** Display-design package, design point of purchase, advanced concepts. Prerequisite: Art 311.

**Art 412. Advanced Graphic Design. (3)** Primarily planned to coordinate graphics projects. Prerequisite: Art 311, 411.

**Art 421. Advanced Oil and Acrylic Painting I. (3)** Advanced study and original projects in oil or acrylics. Prerequisite: Art 321-322 or consent of instructors.

**Art 434. Art History III. (3)** Contemporary. A course dealing with special topics on the development of the visual arts from Neo-Classicism through the Twentieth-Century.

**Art 450. Senior Project I. (3)** The project is designed to give seniors in the department the opportunity of selecting and developing creative and written research related to art. This project is to be done under the supervision of the student's advisor and department head. Three copies of the written project should be typed and approved. One copy is returned to the student and two copies filed in the department.

**Art 452. Advanced Printmaking. (3)** An advanced printmaking course with emphasis on in-depth, individual approaches in the various printmaking processes. Prerequisite: Art 351.

## DEPARTMENT OF BIOLOGICAL SCIENCES

**Edward Risby, Ph.D.,  
Head**

The curriculum of the Department of Biological Sciences is designed to fulfill the requirements in the areas of (1) teacher education, (2) preprofessional training for the medical branches, including health, environmental and basic biological sciences; (3) graduate training of inservice teachers and professionals; and (4) service courses for other departments of the University. The biology curriculum, therefore, allows preparation with emphasis based on the student's interest, in one of the following areas: (1) secondary teacher education for teaching biology, general science, and chemistry, (2) professional biology, zoology or botany-microbiology; (3) pre-medicine or pre-dentistry.

The major undergraduate curriculum offerings terminate in the Bachelor of Science or Arts degree. Upon entering, students desiring the Teacher Education emphasis should select the curriculum for the Teacher Education emphasis with a major in Biology. Those desiring the professional emphasis should select the curriculum for professional emphasis in Zoology or the curriculum for a professional emphasis in Botany-Microbiology. The student must pass a departmental sophomore comprehensive examination over biological principles to be taken during the second semester of the sophomore year. Upon successful completion of the first and second year, and passing the departmental sophomore comprehensive test, the student is to proceed in his specific major emphasis area under the guidance of his major adviser at the beginning of the first semester of the junior year. No grade less than "C" in any major course will be accepted as credit toward meeting departmental requirements.

A minimum number of 132 semester hours are required for each major emphasis area (60 semester hours must be on the 300-400 level). Forty-seven (47) semester hours of biological course work are required in each professional emphasis major (a minimum of 16 must be on the 300-400 level). Thirty-eight (38) semester hours of biological course work are required in the major area with Teacher Certification (a minimum of 16 must be on the 300-400 level). One year of German or French or equivalents must be included. This requirement may also be met by passing a foreign language proficiency test for French or German.

A student must qualify for the Bachelor of Arts degree by completing the equivalent of 20 semester hours of German or French in addition to the regularly prescribed courses.

Seniors who have demonstrated high achievements in their major are encouraged to take Biology 450, an honors research program. This course offers opportunity to gain experience in research under the direction of the Departmental Faculty.

An undergraduate minor in the Department consists of a minimum of 24 semester hours, 16 of which should be taken in sequence in Biology 111-112, Bacteriology 240, and Botany 220. General Chemistry 121-122 is required as a supporting related course and must precede Bacteriology 240. The remaining 8 hours of the minor must be on the 300 and-or 400 level and may be elected in the minor area desired by the student. Any student desiring to be endorsed to teach biology must have the biology minor equivalent of 24 hours plus one year of general chemistry. No grade less than "C" in the minor will count toward meeting minor requirements of the Department of Biological Sciences.

### COMBINATION CURRICULA FOR THE STUDY OF MEDICINE AND DENTISTRY

Curricula preparatory for the study of medicine and dentistry are offered at Tennessee State University in cooperation with Meharry Medical College. The curricula are joint programs between the two institutions and qualify students for the bachelor's degree. The first part of this joint curriculum is offered to regularly enrolled students at Tennessee State University who are pursuing a Bachelor of Arts or a Bachelor of Science curriculum with a major in the Biological Sciences.

The first two years of this curriculum consist of the Basic Curriculum for Professional major in the Biology Lower Division. The third year consists of the Junior Year of either the curriculum for Professional Emphasis in Zoology or in Botany and Microbiology of the Upper Division of Biological Sciences.

The fourth year of the joint curriculum is offered to those students who are admitted to Meharry Medical College. At the successful completion of the freshman year curriculum in the School of Dentistry or School of Medicine of Meharry Medical College, the student makes application to Tennessee State University for the Bachelor of Arts or Science degree. Upon joint recommendation of Meharry Medical College and Tennessee State University, the student becomes a candidate for the Bachelor of Arts or Science degree. The degree is awarded by Tennessee State University.



**CURRICULUM FOR A MAJOR IN BIOLOGY (Professional Emphasis in Zoology)**

FRESHMAN YEAR	Credit Hours	
	Fall	Spring
BIO 111-12 .....	4	4
MATH 161-62 .....	4	4
ENG 101-02 .....	3	3
HIST 201-02 .....	3	3
PE or ERO .....	1	1
BIO 100 .....	1	
MUS 131 or ART 133 .....		2
	16	17

SOPHOMORE YEAR	Credit Hours	
	Fall	Spring
MCB 240 .....	4	
BOT 220 .....		4
ENG 211-12 .....	3	3
GER or FR 101-02 .....	4	4
CHEM 121-22 .....	4	4
PE or AERO .....	1	1
BIO 250 .....		0
	16	16

JUNIOR YEAR	Credit Hours	
	Fall	Spring
BIO 370 .....	4	
ZOO 330 .....		4
CHEM 311-12 .....	5	5
PHY 211-12 .....	4	4
PSY (300 level) .....	3	
BIO Elective .....		4
PHIL (300 level) .....	2	
	18	17

SENIOR YEAR	Credit Hours	
	Fall	Spring
ZOO 430 .....	4	
BIO 491-92 .....	1	1
BIO 480 .....		4
BIO Electives (300-400 level) .....	4	4
SOC 360 or HIST (300 level) .....	3	
Electives (300-400 level) (BCHM 341-42 recommended) .....	4	8
	16	17

**CURRICULUM FOR A MAJOR IN BIOLOGY (Professional emphasis in Botany and Microbiology)**

FRESHMAN YEAR	Credit Hours	
	Fall	Spring
BIO 111-12 .....	4	4
MATH 161-62 .....	4	4
ENG 101-02 .....	3	3
HIST 201-02 .....	3	3
PE or AERO .....	1	1
BIO 100 .....	1	
MUS 131 or ART 133 .....		2
	16	17

SOPHOMORE YEAR	Credit Hours	
	Fall	Spring
BOT 220 .....		4
MCB 240 .....	4	
GER or FR 101-02 .....	4	4
ENG 211-12 .....	3	3
CHEM 121-22 .....	4	4
PE or AERO .....	1	1
BIO 250 .....		0
	16	16

JUNIOR YEAR	Credit Hours	
	Fall	Spring
BIO 370 .....	4	
MCB 310 .....		4
BOT 320 .....		4
CHEM 311-12 .....	5	5
PHY 211-12 .....	4	4
PSY (300 level) .....	3	
PHIL (300 level) .....	2	
	18	17

SENIOR YEAR	Credit Hours	
	Fall	Spring
BOT 420 .....	4	
MCB 410 .....		4
Electives (MCB or BOT 300-400) .....	4	4
SOC 360 or HIST (300 level) .....	3	
Electives (300-400) (BCHM 341-42 recommended) .....	4	8
	15	16

**CURRICULUM FOR A MAJOR IN BIOLOGY (with Teacher Certification)**

FRESHMAN YEAR	Credit Hours	
	Fall	Spring
BIO 111-12 .....	4	4
MATH 161-62 .....	4	4
MUS 131 .....		2
PE or AERO .....	1	1
HIST 201-02 .....	3	3
ENG 101-02 .....	3	3
	15	17

SOPHOMORE YEAR	Credit Hours	
	Fall	Spring
MCB 240 .....	4	
BOT 220 .....		4
CHEM 121-22 .....	4	4
ENG 211-12 .....	3	3
BIO 100 .....	1	
ART 133 .....		2
PE or AERO .....	1	1
BIO 250 .....	0	0
EDCI 201 .....		3
PSY 242 .....	3	
	16	17

JUNIOR YEAR	Credit Hours	
	Fall	Spring
BIO 370 .....	4	
ZOO 340, MICRO 340 or BOT 420 .....	4	4
PHY 211-12 .....	4	4
EDCI 301-387 .....	3	3
PHIL (300 level) .....		2
Elective (300 or 400) (Social Science) .....	3	
BIO Elective (300-400 level) .....		4
	18	17

SENIOR YEAR	Credit Hours	
	Fall	Spring
EDSE 465 .....	3	
EDRP 491 .....		3
SCI ED 371 .....		3
EDCI 472s .....		9
BIO 480 .....	4	
PSY 312 .....	3	
CHEM 360 .....	5	
BIO 491 or 492 HEA (Elective) (300-400 level) .....	1	
	2	
	18	15

**COURSE DESCRIPTIONS**

**BIOLOGY (BIO)**

**College Orientation 100. (1)** Designed to aid in the adjustment of freshmen and new students to the college community. Consideration of Tennessee State University's heritage and mission, personal development, study method evaluation and careers in the biological sciences.

**BIO 111-12. Principles of Animal Biology. (4-4)** This course is designed to provide a sound understanding of structure, function, and life characteristics of animals. Lecture: 2 credits; Laboratory: 2 credits per semester.

**BIO 250. Sophomore Biology Review. (0)** Required for all second semester sophomores. This course, a comprehensive review of basic biologic principles, covers the first two (2) years in the major field. The course terminates in a comprehensive examination which must be passed prior to selecting the specific major.

**BIO 370. Principles of Genetics. (4)** An introduction of genetics, including classical and modern approach, the laws of heredity, role of heredity in developmental physiology, and the relation between heredity and evolution. Prerequisites: Biology 111 and Botany 220. Lecture: 2 credits; Laboratory: 2 credits.

**BIO 380. Biometrics. (3)** An introduction to the methods of statistics that are of particular interest to biologists for experimental design and interpretation. Prerequisites: Math 161, Biology 111, 112 and Botany 220 or their equivalents. (e)

**BIO 440. Special Topic. (3)** Student or faculty generated course. Scope of subject matter to be determined by students and instructor. Prerequisite: 12 hours upper division biology and permission of instructor. (e)

**BIO 460. Junior Honor's Research. (3)** Open to seniors of outstanding attainment who have demonstrated high achievements in their major field. It offers opportunity to do individual research under the direction of a member of the Department Faculty. (e)

**BIO 470. Microtechniques. (4)** Methods for microscopic study of tissues. Prerequisites: Biology 111, 112, Botany 220 and Chemistry 121, 122 or their equivalents. Lecture: 1 credit; Laboratory: 3 credits. (e)

**BIO 480. Principles of Ecology. (4)** Fundamental ecological principles with special reference to levels of organization, population and community properties, structural adaptation, functional adjustments and other factors affecting the distribution of organisms. Prerequisites: Biology 111, 112 and Botany 220. Lecture: 2 credits; Laboratory: 2 credits.

**BIO 490. Cell Biology. (4)** Structure and function of cells and their components. Prerequisites: Chem. 312, Biology 111, 112 and Botany 220 or their equivalents. (e)

**BIO 491-92. Biology Seminar. (1-1)** Current problems in Biology. A minimum of one semester required of all seniors in the Department. Meets one hour per week.



**BOTANY (BOT)**

**BOT 220. General Botany. (4)** Deals with a study of the anatomy, physiology, and taxonomy of plants. Lecture: 2 credits; Laboratory: 2 credits.

**BOT 320. Plant Morphology. (4)** Consideration of the structure, embryology, and phylogeny of higher vascular plants. Prerequisites: Botany 220. Lecture: 2 credits; Laboratory: 2 credits.

**BOT 420. Introductory Plant Physiology. (4)** Consideration of the functions of digestion, mineral, nutrition, growth, photosynthesis, respiration, translocation, photoperiodism, plant hormones, transpiration and water relations as occurring in a typical green plant. Prerequisites: Botany 220 and General Chemistry 121, 122 or equivalents. Lecture: 2 credits; Laboratory: 2 credits.

**BOT 430. Mycology. (4)** Morphology, taxonomy, development and phylogeny of fungi. Prerequisite: Botany 220. Lecture: 2 credits; Laboratory: 2 credits. (e)

**BOT 440. Introductory Plant Pathology. (4)** A course dealing with plants and their diseases, both infectious and non-infectious diseases; plant disease control, impact of plant disease on agriculture. Prerequisites: Botany 220. Lecture: 2 credits; Laboratory: 2 credits. (e)

**BOT 460. Field Botany. (4)** A course designed to acquaint the student with basic principles of plant classification and identification, the use of manuals with reference made to the families, genera and species of the local flora. Prerequisites: Botany 220 or equivalent. Lecture: 1 credit; Laboratory of Field Periods: 3 credits. (e)

**MICROBIOLOGY (MCB)**

**MCB 240. Principles of General Bacteriology. (4)** This course is concerned with the isolation, identification, culture, nutrition, sterilization and chemotherapeutic procedures employed in studying bacteria. Prerequisites: Biology 111, 112, and 1 year General Chemistry (121-122) or equivalents. Lecture: 2 credits; Laboratory: 2 credits.

**MCB 250. General Bacteriology. (4)** Consideration of identification, culture, sterilization and disinfectant procedures employed in studying certain microorganisms. Open to majors in Home Economics, Health and Physical Education. Prerequisites: Biology 111 or Chemistry 121, 122. Lecture: 2 credits; Laboratory: 2 credits. (e)

**MCB 310. Introduction to Microbial Physiology. (4)** This course outlines some of the salient features in the physiology of microorganisms. Selected examples of the metabolism of carbohydrates, lipids and nitrogen containing compounds will be considered as a basis for further understanding of biologic phenomena. Prerequisites: Microbiology 240 and Organic Chemistry 311, concurrently, or equivalents. Lecture: 2 credits; Laboratory: 2 credits.

**MCB 410. Pathogenic Microorganisms. (4)** This course surveys some of the important

features of host-parasite interaction. Characteristics of the organism, host hypersensitivity, natural and acquired immunity will be considered as contributing factors toward this interaction. Modern preventive methods will be emphasized. Prerequisite: Microbiology 240. Lecture: 2 credits; Laboratory: 2 credits.

**MCB 420. Immunology and Serology. (4)** Theories of immunity, training in serological methods and procedures for immunization. Prerequisites: Microbiology 240 and 410. Lecture: 2 credits; Laboratory: 2 credits. (e)

**MCB 430. Virology. (4)** Survey of bacterial, plant, and animal viruses with emphasis on their infectious cycles. Prerequisite: MCRB 240. Lecture: 2 credits; Laboratory: 2 credits. (e)

**ZOOLOGY (ZOO)**

**ZOO 201-02. Human Anatomy and Physiology. (4-4)** The fundamentals of the structure, function and organization of the organ-system of man. These courses should be taken in sequence. Lecture: 2 credits; Laboratory: 2 credits. (e)

**ZOO 330. Comparative Anatomy. (4)** The comparative anatomy and evolution of the organ system of chordate animals. Prerequisites: Biology 111, 112. Lecture: 2 credits; Laboratory: 2 credits.

**ZOO 340. Mammalian Physiology. (4)** Consideration of the dynamic interactions and integrations of mammalian organ systems. Special emphasis is placed upon recent advances in methodology and new concepts in physiology and contributing sciences. Prerequisites: Biology 111, 112 or Biology 105, 106 and Chemistry 121, 122 or equivalents. Lecture: 2 credits; Laboratory: 2 credits. (e)

**ZOO 350. Ornithology. (4)** A study of the natural history of local birds. Prerequisites: Biology 111, 112. Lecture: 2 credits; Laboratory or field periods: 2 credits. (e)

**ZOO 400. Invertebrate Zoology. (4)** This course is a study of the morphology, physiology, taxonomy and life histories of the invertebrates. Emphasis is placed on the systematic developments of invertebrate types. Prerequisites: Biology 111, 112. Lecture: 2 credits; Laboratory: 2 credits. (e)

**ZOO 410. Field Zoology. (4)** Selected groups of animals studied. Methods of collecting, classifying and preserving will be emphasized. Prerequisites: Biology 111, 112. Lecture: 2 credits; Laboratory or field periods: 2 credits. (e)

**ZOO 420. Herpetology. (4)** Classification, distribution, life histories, collections and identification of amphibians and reptiles, primarily of local species. Prerequisites: Biology 111, 112. Lecture: 2 credits; Laboratory or field periods: 2 credits. (e)

**ZOO 430. Embryology. (4)** A general consideration of gametogenesis, fertilization and cleavage in animals and the early development of Echinoderms, Protochordates and selected vertebrates with emphasis on early develop-

ment of the chick. Prerequisites: Zoology 330 is strongly recommended. Lecture: 2 credits; Laboratory: 2 credits.

**ZOO 440. Introduction to Parasitology. (4)** Introduces the student to animal parasites and their methods of entering the body of man and mammals. The several types of host-parasite relationships are surveyed, with emphasis on the effects of parasites on or within the hosts. Immunogenic responses by the host to parasitism are reviewed and a history of this discipline along with past and present contributors enlightens students of parasitology as an applied and/or basic science in biology. Prerequisites: Biology 111, 112. Lecture: 2 credits; Laboratory: 2 credits. (e)

**ZOO 450. Histology. (4)** Study of animal tissues. Prerequisites: Biology 111, 112. Lecture: 2 credits; Laboratory: 2 credits. (e)

**ZOO 460. Endocrinology. (4)** The function of vertebrate hormones with emphasis on those concerned in the physiology of reproduction. Techniques used in small animal surgery in endocrine research. Prerequisites: Zoology 430. Lecture: 2 credits; Laboratory: 2 credits. (e)

**ZOO 470-71. Physiology and Pathophysiology. (4-4)** A closely integrated series of lectures and laboratory demonstrations which emphasize human physiology and pathophysiology. Physiology of the nervous system, blood, circulation, respiration, and special senses is considered as is the basic and applied physiology of the digestive, excretory, and endocrine systems. Mechanisms of integration of various systems are emphasized. Must be taken in sequence. Prerequisites: Zoo 202 and either Chem. 221 or 311. Lecture: 3 credits; Laboratory: 1 credit. (e)

**SCIENCE (SCI)****INTERDISCIPLINARY COURSES**

**SCI 121-22. Introduction to Biophysical Sciences. (3-3)** An interdisciplinary course involving the principles of mathematics, chemistry, physics and biology. The objective of the course is to integrate the applicable areas as they are related to the living organisms. Two lecture periods and one laboratory (2 hours) per week.

**SCI 481-82. Contemporary Problems in Ecology. (3-3)** A study of some of the contemporary problems constituting our environmental crisis; the hazards comprising such problems; and the complexity affecting their resolutions.

**SCI 400. Biomedical Concepts. (2)** This course is designed to provide a sound understanding of biomedical concepts as related to biology, chemistry, mathematics and physics. Prerequisites: Biology 111-12, Chemistry 311 and Physics 211 or their equivalents. (e)

**SCI 401-02. Fundamentals of Medical Science I, II. (3-3)** Disease processes affecting the human body, studies through an integrated approach to specific disease entities. Required of all MRA majors. Prerequisites: MRA 301, 302; MCRB 240; ZOO 201-02 or their equivalents. (e)



## NATURAL SCIENCE COURSES OFFERED AT GULF COAST RESEARCH LABORATORY

By affiliation agreement\* with the Gulf Coast Research Laboratory, Ocean Springs, Mississippi, the following courses are listed which may be taken for resident credit by TSU students:

Zoology 241	Introduction to Marine Zoology (4)
Biology 431	Basic Techniques in Marine Science for Teachers (3)
Biology 445	Special Problems in Marine Science (1-3)
Botany 470	Marine Biology (4)
Biology 475	Salt Marsh Ecology (4)
Microbiology 440	Marine Microbiology (5)
Zoology 490	Marine Invertebrate Zoology (6)
Zoology 445	Parasites of Marine Animals (6)
Zoology 455	Marine Vertebrate Zoology and Ichthyology (6)
Biology 485	Special Problems in Advanced Histology (3-6)
Biology 495	Marine Ecology (5)
Zoology 495	Marine Fisheries Management (4)
Zoology 435	Marine Aquaculture (6)
Chemistry 460	Marine Chemistry (6)
Geology 468	Physical Marine Geology (3)
Geology 469	Chemical Marine Geology

Complete course descriptions and registration forms for courses offered at the Gulf Coast Research Laboratory may be obtained by contacting the Biology Chairman.

\*Subject to negotiation of annual agreement.

## DEPARTMENT OF CHEMISTRY

**Lonnie Haynes, Ph.D.,  
Head**

The purpose of the Department of Chemistry is the preservation, interpretation, dissemination, and advancement of chemical ideas and knowledge. Thus, the principle objectives of the Department of Chemistry are (1) to instruct students in the basic principles and techniques of the various branches of chemistry, (2) to educate the general public as well as students in other areas of the importance of chemistry to the quality of the environment and everyday living, (3) to engage in research and publication of new scientific information.

Educational goals toward which the chemistry majors are expected to strive before their graduation are mastery of the basic concepts and techniques of the fields of analytical, inorganic, organic, physical, biochemistry, and proficiency in searching professional literature.

The Department of Chemistry offers Bachelor of Science and Master of Science degrees in chemistry. The chemistry curriculum is designed to provide (1) a collegiate major in chemistry which satisfies the criteria generally adopted by leading colleges and universities as well as the American Chemical Society, (2) meaningful service courses to other departments in the University, and (3) the preparation of prospective science teachers for secondary schools, and (4) to implement a program of training for students who wish to lay a foundation for graduate study in chemistry, medicine, veterinary medicine, molecular biology, agricultural chemistry, or nutrition, (5) to prepare students for employment in laboratories, hospitals, pharmaceutical and food processing companies, and other industries that employ technically trained staff for control or research work, and (6) to offer courses for students in the several departments of the University whose programs of study require such training. The success in realizing the objectives is best reflected by the success of the students of the Department in being accepted in graduate and professional schools and their success in positions with major companies throughout the country.





**PROGRAM FOR THE PROFESSIONAL CHEMISTRY MAJOR**

A professional chemistry major consists of a minimum of 53 semester hours of chemistry, 39 of which must be in 300 and 400 level courses. These credits may be accumulated through pursuing the following courses.

	Main Campus	Downtown Campus
CHEM 121-122 General .....	8 sem. hrs.	8 sem. hrs.
CHEM 311-312 Organic .....	10 sem. hrs.	8 sem. hrs.
CHEM 321-322 Physical .....	10 sem. hrs.	8 sem. hrs.
CHEM 431-432 Analytical .....	10 sem. hrs.	8 sem. hrs.
CHEM. 410 Chem. Bibliography .....	2 sem. hrs.	2 sem. hrs.
CHEM 420 Inorganic .....	3 sem. hrs.	3 sem. hrs.
CHEM 450 Senior Project .....	2 sem. hrs.	2 sem. hrs.
CHEM 491-492 Seminar .....	2 sem. hrs.	2 sem. hrs.
CHEM Electives .....	6 sem. hrs.	12 sem. hrs.
<b>Total hours Chemistry</b>	<b>53 sem. hrs.</b>	<b>53 sem. hrs.</b>

**FOR A MINOR IN CHEMISTRY**

	Main Campus	Downtown Campus
CHEM 121-122 General .....	8 sem. hrs.	8 sem. hrs.
CHEM 311-312 Organic .....	10 sem. hrs.	8 sem. hrs.
CHEM 431-432 Analytical .....	10 sem. hrs.	8 sem. hrs.
CHEM Electives .....		4 sem. hrs.
<b>Total hours Chemistry</b>	<b>28 sem. hrs.</b>	<b>28 sem. hrs.</b>

**CURRICULUM FOR A MAJOR IN CHEMISTRY**

(Professional Emphasis)

FRESHMAN YEAR	Semester	Hours
	I	II
CHEM 121-2 .....	3	3
CHEM 121L-2L (121K-2K) .....	1 (1)	1 (1)
ENG 101-2 .....	3	3
HIST 201-2 .....	3	3
MATH 161-2a .....	4	4
SOC 211 .....		3
PE or AERO .....	1	1
	<b>15 (15)</b>	<b>18 (18)</b>

SOPHOMORE YEAR	Semester	Hours
	I	II
CHEM 311-2 .....	3	3
CHEM 311L-2L (311K-2K) .....	2 (1)	2 (1)
MATH 261-2b .....	4	4
PHY 211-2 .....	4	4
ENG 211-2 .....	3	3
PE or AERO .....	1	1
	<b>17 (16)</b>	<b>17 (16)</b>

(Professional Emphasis)

JUNIOR YEAR	Semester	Hours
	I	II
CHEM 321-2 .....	3	3
CHEM 321L-2L (321K-2K) .....	2 (1)	2 (1)
ART 133 .....	2	
MUS 131 .....		2
COEM SCI .....	3	3
Electives (300-400 level) .....	6	6
	<b>16 (16)</b>	<b>16 (15)</b>

SENIOR YEAR	Semester	Hours
	I	II
CHEM 431-2 .....	3	3
CHEM 431L-2L (431K-2K) .....	2 (1)	2 (1)
CHEM 450 (Sen. Proj.) .....	2	
CHEM 410 .....	2	
CHEM 491-2 .....	1	1
CS .....	3	3
Electives (300-400 level) .....	3	7
	<b>15 (16)</b>	<b>16 (15)</b>

**AREAS OF SPECIALIZATION**

Inorganic Chemistry Physical Chemistry  
Organic Chemistry Analytical Chemistry  
Biochemistry

- Requires on ACT Math scores of 15 or better; otherwise Math 111-2 is a prerequisite.
- Students planning to enter the Biochemical Emphasis, Medical Technology or Medical Professional School may substitute Biology 111-2.
- Computer Science may be substituted.

**CHEMISTRY WITH BIOCHEMICAL EMPHASIS**

JUNIOR YEAR	Semester	Hours
	I	II
CHEM 341-2 .....	3	3
CHEM 341L-2L (341K-2K) .....	2 (1)	2 (2)
ART 133 .....	2	
MUS 131 .....		2
MCB 240 .....	3	
MCB 240L .....	2	
CHEM 310 .....		3
CHEM 310L (310K) .....		2 (1)
Electives (300-400 level) .....	3	4
	<b>16 (15)</b>	<b>16 (14)</b>

SENIOR YEAR	Semester	Hours
	I	II
CHEM 321 .....	3	
CHEM 321L (321K) .....	2 (1)	
CHEM 450 .....	2	
CHEM 410 .....	2	
CHEM 491-2 .....	1	1
CHEM 470 .....	3	
CHEM 470L (470K) .....	2 (1)	
Electives (300-400 Level) .....		17
	<b>15 (14)</b>	<b>18</b>

**CURRICULUM FOR MAJOR IN CHEMISTRY**

(With Teacher Certification)

FRESHMAN YEAR	Semester	Hours
	I	II
ENG 101-2 .....	3	3
HIST 201-2 .....	3	3
CHEM 121-2 .....	3	3
CHEM 121L-2L (121K-2K) .....	1 (1)	1 (1)
MATH 161-2a .....	4	4
PE 11-12 or AERO 151-2 .....	1	1
	<b>15 (15)</b>	<b>15 (15)</b>

SOPHOMORE YEAR	Semester	Hours
	I	II
ENG 211-2 .....	3	3
CHEM 311-2 .....	3	3
CHEM 311L-2L (311K-2K) .....	2 (1)	2 (1)
GER or FR 101-2 .....	4	4
EDCI 201; PSY 242 .....	3	3
PE 20-50 or AERO 251-2 .....	1	1
	<b>16 (15)</b>	<b>16 (15)</b>

JUNIOR YEAR	Semester	Hours
	I	II
EDCI 301, EDCI 463 .....	3	2
GER or FR 201-2c .....	3	3
CHEM 321-2 .....	3	3
CHEM 321L-2L (321K-2K) .....	2 (1)	2 (1)
PHY 211-2 .....	4	4
HUM Electives (from two fields) 300-400 level .....	2	2
	<b>17 (16)</b>	<b>16 (17)</b>

SENIOR YEAR	Semester	Hours
	I	II
CHEM 491-2 .....	1	1
CHEM 450 .....	2	
PSY 312; EDRD 491 .....	3	3
EDCI 371 .....		3
EDCI 310 .....		3
EDCI 387, 472S .....	3	9
SOC 300 .....	3	
EDSE 465 .....	3	
HEA (300-400 level) .....	2	
	<b>17</b>	<b>19</b>





# DEPARTMENT OF CHEMISTRY

## COURSE OFFERINGS CHEMISTRY (CHEM)

**CHEM. 100 and 100L (3 + 1) 100K (1)\*** Basic Chemistry—A study of the fundamentals of chemistry and their application to biological nature. Offered for non-science students only. Three lecture and one three-hour laboratory per week.

**CHEM. 101-2 and 101L-2L (2-2 + 0-0).** Fundamentals of Chemistry for Dental Hygiene Students only. A study of the fundamentals of general chemistry, with some organic, while chemistry 101L-2L will involve organic and biochemistry. Two lectures and one two-hour laboratory per week.

**CHEM. 121-2 and 121L-2L (3-3 + 1-1) 121K-2K (1-1)\*.** Introduction to Chemical principles. Lectures deal with the basic theories of Chemistry; atomic structure, kinetic theory, chemical stoichiometry, the chemical bond, oxidation-reduction reactions, chemical equilibrium. Laboratory during the second semester is devoted to qualitative analysis including cation and anion analysis. A good mathematical background is necessary.

**CHEM. 131-2 and 131K-2K (3-3 + 1-1)\*.** General Chemistry for non-science majors. The particle nature of matter, substances and chemical change, kinetic theory and selected topics from the fields of inorganic chemistry, bio-chemistry, nuclear-chemistry, and environmental chemistry. Must be taken in sequence.

**CHEM. 121H-2H and 121A-2A (3-3 + 1-1).** Introduction to Chemical Principles. For chemistry majors and honor students only.

**CHEM 250 (3)\*.** Introduction to Pharmacology. An introductory study of mechanism, dosages, and side effects of pharmacological classes of medication. Prerequisite: CHEM. 121-2 or CHM. 131-2.

**CHEM 310 (3).** Analytical Chemistry. Chemical Equilibrium Acid-base equilibria in water. Solubility, complexions, stoichiometry, volumetric titrations, red-ox equilibria and electrochemistry including activity effects and electro-analytical chemistry. Pre-requisites: CHEM. 122.

**CHEM 310L (2) 310K (1)\*.** Analytical Chemistry Laboratory. Chemical Equilibrium Laboratory. Application of volumetric titrations, elementary absorption, and potentiometric methods with emphasis upon determination of parameters and various equilibrium systems. Coreq: 310.

**CHEM. 311-2 (3-3) 311L-2L (2-2) 311K-2K (1-1)\*.** Organic Chemistry. Chemistry 121-2 are pre-requisites, with a minimum grade of "C" in each course. A systematic study of the source, physical properties, and chemical behavior of aliphatic, aromatic, and heterocyclic compounds of carbon. Three lectures and two three-hour laboratory periods. Also for Biology Majors.

**CHEM. 320 (3).** Physiological Chemistry. Presents the fundamentals of human physiological chemistry. Required of majors in foods and nutrition. Pre-requisites: CHM. 360. Three lectures and recitation periods per week.

**CHEM. 320L (2).** Physiological Chemistry Laboratory. Pre-requisites: CHEM 360. Four hours per week.

**CHEM. 321-2 (3-3) 321L-2L (2-2) 321K-2K\*.** Introduction to Physical Chemistry. Pre-requisites: Math 261-2, Phys. 211-2, or permission of instructor. Properties of ideal and real gases, kinetic molecular theory of gases, chemical thermodynamics, chemical equilibrium, solutions of electrolytes and non-electrolytes, electro-chemistry, liquid and solid states. For the second semester. Rate and mechanism of chemical reaction, introductory quantum mechanics, atomic and molecular structure, theory and nature of chemical bonding, molecular spectroscopy and photochemistry. Three lectures, one four-hour laboratory and one two-hour problem session a week.

**CHEM. 331-2 (3-3)\*.** Fundamentals of Physical Chemistry. A non-calculus survey of physical chemistry. Includes properties of gases. Liquids, and solids; elementary thermodynamics, kinetics, and molecular structure. Pre-req: CHEM. 312 & Math 162. Not available for students having credit for 321-322.

**CHEM. 331K-2K (1-1)\*.** Fundamentals of Physical Chemistry Laboratory. Fundamental of gases, liquids, chemical equilibrium, reaction kinetics, and solutions. Corequisite: 311-2. Not available for students having credit for 321-2.

**CHEM. 341-2 (3-3).** General Biochemistry. A comprehensive study of the chemistry and biochemistry of carbohydrates, lipids, proteins, enzymes, vitamins and minerals important in the metabolism and nutrition of animals and plants. Required of biochemistry students. Pre-requisites: CHEM. 121-2, 311-2. Three lecture periods per week.

**CHEM. 341L-2L (2-2) 341K-2K (1-1)\*.** General Biochemistry Laboratory. Prerequisites: CHM. 121-2 and 311-2. Four hours per week.

**CHEM. 361-2 (3-)\*.** Introduction to Polymer Science. Organic Chemical reactions leading to high polymers; physical properties and physical behavior of polymers; polymer processing and end uses. Pre-req: CHEM. 122, Math 261, and Phys. 222 or permission of instructor.

**CHEM. 360 and 360L (3 + 2) 360K (1)\*.** Organic Chemistry Survey. Chemistry 121-2 are pre-requisites. Important classes of organic compounds are presented. Emphasis is placed upon the study of hydrocarbons and their principal derivatives: carbohydrates, proteins, fats and oils, vitamins and dyes. Designed for majors in Agriculture, Home Economics, and Health. Three lectures and one two-hour laboratory periods.

**CHEM. 400 (3)\*.** Special Topics. Students or faculty generated course. Scope of subject matter to be determined by students and instructor. Pre-requisite: Permission of the instructor.

**CHEM. 410 (2).** Chemical Bibliography. Pre-requisites: Chemistry 311-2 and a reading knowledge of German. A study of how to use the chemical journals, reference books and other sources of chemical information. A systematic search in the chemical literature for information on several compounds and topics will be included. Two conferences a week.

**CHEM. 420 (3).** Inorganic Chemistry. Deals with the principles and modern theories of inorganic chemistry including atomic and molecular structure. Must have had or be taking CHM. 321-2. Offered in alternative years during the Fall Semester. Three lectures per week. Required of all Chemistry majors. Open to other interested students with the consent of the Professor in charge of the course.

**CHEM. 431-2 (3-3) 431L-2L (2-2) 431K-2K (1-1)\*.** Analytical Chemistry. A sequential course in Analytical Chemistry, principles and application of analytical instrumentation, quantitative electrical and optical methods of analysis. Pre-requisites CHM. 121-2, 221-2, 321-2, 321-2, one year of college physics and must have had or be taking calculus. Students whose curriculum calls for analytical chemistry but who are not majoring in chemistry, should consult with the Professor in charge of the course.

**CHEM. 451-2 (3-3).** Cellular and Comparative Biochemistry. Electrolyte behavior and biological functions; catabolism and energy capture; synthetic metabolism; nuclei and function, protein synthesis and biochemical processes. Prerequisite: CHEM 311-2 and an introductory course in biology (such as Biology 106 or 112 or equivalent).

**CHEM. 451K-2K (2-2)\*.** Cellular and Comparative Biochemistry Laboratory. Laboratory course to be taken concurrently. Prerequisite: CHEM 311-2, 311L-2L and CHEM. 310.

**CHEM. 440 (3)\*.** Organic Reaction Mechanisms. Pre-req: 311-2.

**CHEM. 450 (2).** Senior Project. Required of all seniors. A special laboratory investigation is carried out under the direction of the instructor and the results are written up scientifically. Required of candidates for the bachelor's degree. Hours arranged.

**CHEM. 460 and 460L (3 + 2) 460K (1)\*.** Organic Qualitative Analysis. Chemistry 311-2, and 410 and pre-requisites. A systematic study of the solubility and class reactions of the principal classes of organic compounds. It includes also identification of pure organic compounds and mixtures. Two lectures and two three-hour laboratory periods.

**CHEM. 470 (3).** Biochemical Analysis. Designed to familiarize the student with the principles and practices involved in the analysis of biological materials. Pre-requisites: CHM. 121-2 and 311-2; and CHEM. 341-2. Three lecture periods per week.

**CHEM. 470L (2) 470K (1)\*.** Biochemical Analysis Laboratory. Pre-requisites: CHM. 121-2, 311-2, and CHM. 341-2. Four hours per week.

\*Downtown Campus.

\*Downtown Campus

\*Downtown Campus



**CHEM. 481-2 (3-3)\*.** Introduction to Quantum Chemistry. Introduction to fundamental principles of quantum chemistry including methods of calculation. Application to atomic, molecular, and nuclear chemistry and physics. Prerequisite: 322.

**CHEM. 491-2 (1-1).** Chemistry Seminar. Required of all seniors.

### SCIENCE FOR ELEMENTARY EDUCATION TEACHERS.

Sci. 301-2 and 301L-2L (2-2 + 1-1). Science for the Elementary School Teachers. Deals with discussions, planning and experimenting in the physical, biological and earth sciences with particular emphasis on activities and experiences appropriate to youngsters in the elementary school. Two one-hour lectures and one two-hour laboratory per week each semester.

\*Downtown Campus



## DEPARTMENT OF COMMUNICATION

**Jamye Williams, Ph.D.,**  
**Head**

The Department of Communication, in addition to the general purpose of offering the student an overall view of the importance of the communication arts in contemporary society, has the following objectives:

1. To prepare students to become teachers of speech communication and theatre in high schools and colleges.
2. To prepare students for careers in educational, community, and professional theatre.
3. To prepare students for careers in broadcasting and journalism.
4. To prepare students for allied occupations such as public relations, sales, communication consulting, civil service, personnel work and counseling.
5. To provide assistance to students preparing for such professions as law and the ministry.
6. To prepare students for careers in pa-

rabroadcasting—business, industrial, educational and medical video communications.

7. To improve, by providing service courses, the speech proficiency of the student population in general.
8. To provide cultural enrichment for the University and community through extra-curricular activities in dramatics and forensics.

The Department of Communication offers programs leading to the degrees of Bachelor of Arts and Bachelor of Science with a major in Speech Communication and Theatre. The program also offers the options of a concentration in speech communication, in theatre, or in mass communication (radio, television, and journalism). A minor in Speech Communication and Theatre is also offered.

The programs for the Bachelor of Science and the Bachelor of Arts degrees require a minimum of 132 semester hours with 60 of these being on the 300-400 level. The Bachelor of Science degree with teacher certification requires, in addition to the General Education Core, a minimum of 24 semester hours in the major area and 33 semester hours in the professional core. For the Bachelor of Arts degree with teacher certification, the additional requirement is 8 to 14 semester hours in a modern foreign language. Students who have completed no units of a modern foreign language in high school are required to complete four semesters of work in a language. Students who have completed two units of a modern foreign language in high school are required to complete two semesters in the chosen language, beginning with the 200-level courses.

The Bachelor of Science program for the non-teaching major requires, in addition to the General Education Core and the minimum 24 semester hours in the major area, an additional 18 semester hours in that major area. The requirement for the Bachelor of Arts degree without certification is an additional 8 to 14 semester hours in a modern foreign language as described above.

The Department offers a minor in Speech Communication and Theatre, requiring 18 semester hours which may be distributed within each optional area. A minor with a concentration in Speech Communication includes Spch 210, 220, 320 or 420, 354, 360, 322 or Jour 301-302. A minor with a concentration in Theatre includes Thea 240, 301, 341, 400, 431, and an elective. A minor with a concentration in Speech Communication and Theatre includes Spch 210, 354, 360, Thea 340, 303, 341. The requirements for a minor in Mass Communication include Spch 200, 360, 364, 440, Jour 301, 302, 304.

Majors in the Department of Communication are encouraged to pursue a second major or a minor in such fields as English, Business, History, Government and Public Affairs, Modern Foreign Languages, Sociology, and Reading Education.

Students in this department are reminded that they are expected to show steady growth in the development of communicative skills, including reading, writing, speaking, and listening. They are urged to remember that they are preparing to become specialists or professionals in communication.

Students receiving a D or F grade in major subjects are required to repeat those courses to obtain a C or above. In addition, students seeking certification in Teacher Education are required to maintain an average of 2.25 in the major courses.

The Department in its effort to encourage participation in national professional organizations has chapters of Theta Alpha Phi; National Theatre Honors Fraternity and Phi Kappa Delta; National Forensics Fraternity.

Students excelling in the various departmental activities are given awards by the T.E. Poag Players Guild, Theta Alpha Phi, and the Children's Theatre. In addition, the Jamye C. Williams Communication Award is given annually to a graduating senior who has maintained a high academic average, contributed to the extra-curricular program, and demonstrated high standards of personal conduct.

The Department has one scholarship which is given annually by the Life and Casualty Insurance Company to a student of the Nashville area who excels academically and who plans a career in broadcasting.



CURRICULUM FOR A BACHELOR OF ARTS DEGREE IN SPEECH COMMUNICATION AND THEATRE

This program follows the Bachelor of Science curriculum with the exception of the foreign language requirement as specified in the University Requirements for the Bachelor of Arts Degree. The required number of hours in a foreign language should be taken in place of electives.

BACHELOR OF SCIENCE DEGREE PROGRAM (With Teacher Certification)

FRESHMAN YEAR		Credit Hours	
		Fall	Spring
THEA 111, 112		2	2
ENG 101, 102		3	3
SCI 121, 122		3	3
SPCH 200; MATH 111		2	4
HIST 201, 202		3	3
PE or AERO		1	1
SPCH 101		1	
		15	16

SOPHOMORE YEAR		Credit Hours	
		Fall	Spring
ENG 211, 212		3	3
EDCI 201; PSY 242		3	3
HEA 151; THEA 120		2	2
ART 133 or MUS 131			2
THEA 240; GPA 221		3	3
SPCH 210; SPCH 220		3	3
PE or AERO		1	1
Elective (300-400 level)		2	
		17	17

JUNIOR YEAR		Credit Hours	
		Fall	Spring
EDCI 301, 387		3	3
PSY 312			3
SPCH 354; 358 or 356		3	3/2
THEA 401, 303		3	3
THEA 341; SPCH 434		3	2
THEA 351 or 352		3	
Electives (300-400 level)		3	3/4
		18	17

SENIOR YEAR		Credit Hours	
		Fall	Spring
SPCH 420		3	
THEA 400		3	
SPCH 450		3	
SPCH 371			3
EDRD 491			3
EDCI 472			9
EDSE 465		3	
Electives (300-400 level)		6	
		18	15

BACHELOR OF SCIENCE DEGREE PROGRAM (Without Teacher Certification)

FRESHMAN YEAR		Credit Hours	
		Fall	Spring
THEA 111, 112		2	2
ENG 101, 102		3	3
SCI 121, 122		3	3
SPCH 200; MATH 111		2	4
HIST 201, 202		3	3
SPCH 101		1	
PE or AERO		1	1
		15	16

SOPHOMORE YEAR		Credit Hours	
		Fall	Spring
ENG 211, 212		3	3
SPCH 210, 220		3	3
THEA 240; GPA 222		3	3
THEA 120; ART 133 or MUS 131		2	2
JOUR 301; SPCH 375		3	3
PE or AERO		1	1
Electives		3	3
		18	18

JUNIOR YEAR		Credit Hours	
		Fall	Spring
SPCH 320, 354		3	3
SPCH 322, 356		3	2
SPCH 362, 324		3	2
THEA 401, 403		3	3
THEA 341, 342 or 343		3	3
THEA 351, 352		3	3
		18	16

SENIOR YEAR		Credit Hours	
		Fall	Spring
SPCH 420, 434		3	2
THEA 400, 402		3	3
SPCH 450; THEA 432		3	3
Electives (300-400 level)		6	9
		15	17

NOTE: Students desiring one of the optional areas of emphasis will substitute the following courses in their junior and senior years.

OPTION 1-SPEECH COMMUNICATION EMPHASIS		Credit Hours	
JUNIOR YEAR		Fall	Spring
SPCH 320, 354		3	3
SPCH 322, 324		3	2
SPCH 362, 364		3	3
Electives (300-400 level)		9	9
		18	17

SENIOR YEAR		Credit Hours	
		Fall	Spring
SPCH 420, 434		3	2
SPCH 430, 448		3	3
SPCH 450		3	
Electives (300-400 level)		6	9
		15	14

OPTION 2-THEATRE EMPHASIS		Credit Hours	
JUNIOR YEAR		Fall	Spring
THEA 303, 304		3	3
THEA 401, 403		3	3
THEA 351, 352		3	3
THEA 342; SPCH 354		3	3
SPCH 356 or SPCH 358			2/3
Electives (300-400 level)		6	3
		18	17/18

SENIOR YEAR		Credit Hours	
		Fall	Spring
THEA 400, 402		3	3
THEA 431, 422		3	3
SPCH 450		3	
Electives (300-400 level)		6	9
		15	15

OPTION 3-MASS COMMUNICATION EMPHASIS		Credit Hours	
FRESHMAN YEAR		Fall	Spring
ENG 101, 102		3	3
SCI 121, 122		3	3
SPCH 200		2	
HIST 201, 202		3	3
SPCH 101; ART 133 or MUS 131 or PHIL		1	2
PE or AERO		1	1
MATH 111			4
THEA 111 or 112 or Elective		2	
		15	16

SOPHOMORE YEAR		Credit Hours	
		Fall	Spring
ENG 211, 212		3	3
SPCH 210, 364*		3	3
JOUR 301, 302		3	3
THEA 120; SPCH 375 or Elective		2	3
SPCH 220; GPA 221 or SOC 211 or PSY 201		3	3
THEA 240 or GPA 222 or Elective		3	
PE or AFROTC		1	1
		18	16

JUNIOR YEAR		Credit Hours	
		Fall	Spring
SPCH 360-362 or Elective		3	3
GPA 315; 452 or Elective		3	3
SPCH 370 or JOUR 304; Elective		3	3
SPCH 448; JOUR 410 or Elective		3	3
THEA 352 or JOUR 420 or Elective		3	3
MG 302 or Elective, Elec.		3	3
		18	18

JOUR 410 is required of journalism students.

Suggested Electives:		Credit Hours	
		Fall	Spring
ECON 211, 212			
Adv Typing			
Adv Bus. Mng.			
MK 301, 303, 415			
PHIL 201, 202, 250			
ART 132, 326 (Photography)			
HIST 373			
ENG 311			
THEA 303, 304, 352			
SPCH 375			
SOC 212			

SENIOR YEAR		Credit Hours	
		Fall	Spring
SPCH 450, elective		3	3
Electives		12	13
		15	16

All Mass Communication students must pass the typing test or the University's typing course with a grade of C or better.



# DEPARTMENT OF COMMUNICATION

## COURSE OFFERINGS SPEECH (SPCH)

**SPCH 101. Freshman Orientation.** (1) A course designed to orient freshmen to the various facets of college life, including academic advisement, educational and vocational planning, and personal adjustment.

**SPCH 200. Introduction to Mass Communication.** (2) A survey of the mass media and their impact on the ideas, attitudes, and impressions of society.

**SPCH 210. Fundamentals of Speech Communication.** (3) A study of the fundamentals relating to the various types of speech communication.

**SPCH 220. Public Speaking.** (3) A study of the principles of speech composition and delivery with emphasis upon the preparing and presenting of the various forms of oral communication.

**SPCH 220H. Honors Public Speaking.** (3) Honors section of SPCH 220.

**SPCH 230. Business and Professional Speech Communication.** (3) Designed specifically for the student with neither a major nor minor in the field of speech. Emphasis is placed on the following speech situations: business interviews, conferences, reports, and similar types of business conversations.

**SPCH 320. Argumentation and Debate.** (3) A study of the principles and practices of argumentation, an analysis of propositions and evidence, brief making, and preparation and delivery of forensics, as well as participation in classroom discussions. Techniques governing round table, forum and panel discussions will be studied.

**SPCH 322. Advanced Public Speaking.** (3) A study of the standards of criticism and techniques involved in effective public address. Prerequisite: SPCH 220. (Formerly SPCH 420)

**SPCH 324. Parliamentary Procedure.** (2) A study of the rules and techniques of parliamentary practices.

**SPCH 354. Oral Interpretation.** (3) Introductory course to develop understanding of and appreciation for literature through the oral recreation of poetry, prose, and drama. Recommended for prospective teachers of literature.

**SPCH 356. Choral Speaking.** (2) Oral group interpretation of literature. Affords an opportunity for intensified and vital artistic expressions through the formation of a speaking choir. Values for both elementary and adult groups. Methods of conducting groups and selection of materials will be considered. (Class limited to 25)

**SPCH 358. Readers Theatre.** (3) Oral interpretation of dramatic texts. Prerequisite: SPCH 354.

**SPCH 360. Broadcasting in America.** (3) Overview of the history, form, content, and social impact of American radio and television. Examples of contemporary broadcasting are analyzed in these terms.

**SPCH 362. Radio and Television Communication.** (3) The course covers all types of non-dramatic broadcast performance. Practical application in a laboratory situation.

**SPCH 364. Radio and Television Production.** (3) An introductory course dealing with the basic principles of directing and producing radio and television programs. Practical application in a laboratory situation.

**SPCH 370. Radio and Television Writing.** (3) A study of the techniques and methods used in writing radio and television scripts. Students will be required to write a number of scripts for various types of programs. Prerequisite: SPCH 364 or consent of instructor.

**SPCH 371. Methods of Teaching Speech Communication and Theatre.** (3) A methods course in the teaching of speech, theatre, and communication on the secondary level. Field Experience required.

**SPCH 372. Communication Lab.** (3) A practicum course involving radio production and broadcasting work at WTSU, the campus radio station. Students undertake a variety of broadcasting responsibilities under the supervision of the station manager. Prerequisites: Spch 364 and/or permission of instructor. May be taken twice for credit.

**SPCH 375. Communicative Skills.** (3) A course to improve the students' communicative skills, verbal and written, preparing them for the professional world.

**SPCH 410. History of English Language.** (3) Same as English 410.

**SPCH 420. Small Group Communication.** (3) A course with focuses on communication in small groups, emphasizing principles, practices, and patterns in practical situations (Spch 322).

**SPCH 430. Psychology of Speech Communication.** (3) A study of basic psychological factors and their relation to the various types of communicative processes. The nature, origin, and purposes of speech are analyzed, as well as the development of language and speech in the individual.

**SPCH 434. Contemporary Black Speakers.** (2) A study of selected speeches of contemporary black leaders who have contributed to and made an impact on American life. The speeches are analyzed according to the principles of rhetoric, based on Aristotelian standards. Prerequisite: SPCH 210 or 220.

**SPCH 436. Broadcast Audience Analysis.** (3) Covers the principles behind and use of the standard broadcast rating services such as Nielsen and ARB. Design, implementation and use of specialized, in-depth surveys are also covered, and class members will help design and participate in at least one such survey.

**SPCH 438. Broadcast Station Management.** (3) Covers legal, social, programming and economic aspects of radio and television station management. Guest lectures by local station managers and department heads are an important feature of the course. Prerequisite: Spch 360 or permission of instructor.

**SPCH 440. Radio and TV Programming.** (3) Television and radio programming are considered in terms of content, social impact and artistic merit. News, documentary, public affairs, talk shows, light entertainment, serious drama, and advertisements, as well as program schedules as a whole, are analyzed. Prerequisites: SPCH 364 or permission of instructor.

**SPCH 442. Communication Internship.** (3) Internships are cooperative programs between TSU and local media, in which students undertake various duties. Specific internships available change from semester to semester. May be taken three times for credit but no more than twice in the same area. Prerequisites: Introductory courses in area related to internship and/or permission of instructor.

**SPCH 444. Advanced Television Production.** (3) Provides the student with experience in producing and directing television programs. Various aspects of production and direction are covered in greater depth. Prerequisite: SPCH 360.

**SPCH 446. Radio and Television Advertising.** (3) A study of the basic advertising techniques with emphasis on salesmanship in relation to the media. Prerequisite: SPCH 360.

**SPCH 448. Principles of Public Relations.** (3) A study of the development, scope, and roles of public relations in society.

**SPCH 449. Speech and Theatre for the Elementary Teacher.** (3) The course is designed for the elementary teacher with a minimum of training and experience in speech communication and theatre. The focus is on activities of a practical nature the elementary teacher may utilize in the classroom. Representative topics include speech development and disorders, speech activities, oral interpretation, creative dramatics and puppetry.

**SPCH 450. Senior Project.** (3) Individual research or project.

**SPCH 452. Communication Law.** (3) Law and regulation are analyzed in terms of the social, political and/or economic interests they were designed to protect, and in terms of their impact on the communication industry. First amendment, right of privacy, communication ethics are considered. Prerequisite: SPCH 360 or permission of instructor.

**SPCH 458. Advanced Public Relations.** (3) Practical exercises in public relations, stressing campaigns, schedules, budgets, and media strategies. Prerequisite: SPCH 448.

**SPCH 472. Observation and Student Teaching Public School.** (9)

**SPCH 480. Independent Study.** (1-3) Individual study and research under faculty guidance. May be taken twice for credit.



**THEATRE (THEA)**

**THEA 111. Theatre Practice I. (2)** A course introducing the student to theatre technology, stage terms, building of scenery. Laboratory experience.

**THEA 112. Theatre Practice II. (2)** A course dealing with such fundamentals as floor plans, perspective drawings, introduction to make-up, continuation of theatre technology with laboratory experience.

**THEA 120. Appreciation of Drama. (2)** Introduction to dramatic principles through the study of major periods and representative plays from the Greek period to the present.

**THEA 120H. Honors Appreciation of Drama. (2)** Honors section of THEA 120.

**THEA 240. Elementary Acting. (3)** Study and practice in the fundamentals of acting technique based on play and character analysis. The importance of voice, posture, gesture, and movement in theatrical expressiveness will be emphasized using speeches and short scenes from the world's best dramas.

**THEA 303. Directing. (3)** A course requiring the analyzing of scripts and the directing of one-act plays, with attention to casting, blocking and rehearsal styles through practicum. Prerequisite: THEA 111, 112, and 240.

**THEA 304. Playwriting. (3)** A study of the theory and practice of writing one-act plays for the stage.

**THEA 341. Children's Theatre I. Creative Dramatics. (3)** Study of a process used to help drama students develop more sensitive characterizations and to make them more aware of such demands of a drama as structure, pace, mood, and tensions. The same process may be used as a teaching tool in other areas, such as the Language Arts Program in elementary and secondary schools. The course is taught in a laboratory situation.

**THEA 342. Children's Theatre II. Play Production. (3)** Fundamental principles of crew and committee work for a children's play are taught by the student's actual participation in some phase of the productions, such as cast member, crew member, or committee member. Cast members may include people from the third grade through graduate level.

**THEA 343. Children's Theatre III. Puppetry. (2)** Study of the process in producing a simple hand-puppet show, with the emphasis on a method of building the script from fairy tales or folk plays. This process can be valuable to teachers or park supervisors, as well as to drama students.

**THEA 344. Drama Workshop I. (1-2)** Credit given for acting, crew, or committee work in a production. Admission by instructor's permission.

**THEA 351. Classical Drama. (3)** Study of western world's masterpieces from the Greeks to the Restoration. Readings and reports.

**THEA 352. Modern Drama. (3)** Extensive study of world-famous plays from 1880's to the present day. Readings and reports.

**THEA 400. Scene Design and Stagecraft. (3)** Advanced scene design and advanced stagecraft. Construction of three-dimensional scenery required. Practicum with current productions.

**THEA 401. History of Drama I. (3)** A course based on the development, literature, and staging practices of the theatre from the Egyptians to the Restoration Period. (Formerly THEA 301.)

**THEA 402. Stage Lighting and Stage Makeup. (3)** Advanced make-up and lighting practicum in major productions and laboratory productions.

**THEA 403. History of Drama II. (3)** A course based on the development, literature, and staging practices of the theatre from the Restoration through the 19th century. (Formerly THEA 302)

**THEA 422. Contemporary Black Drama. (2)** A course based on the study of dramas by representative contemporary black playwrights.

**THEA 431. Shakespeare. (3)** Study of the principal plays of Shakespeare. (Same as English 431)

**JOURNALISM (JOUR)**

**JOUR 301. Survey of Journalism. (3)** A practical course in journalism with emphasis upon the organization and function of daily and weekly newspapers, community publicity, school publications, introduction to news writing.

**JOUR 302. News Writing. (3)** Introduction to reporting techniques, with emphasis on news writing.

**JOUR 304. Advanced Reporting. (3)** Practice in advanced news writing with emphasis on news features and beat reporting. Prerequisite: JOUR 302.

**JOUR 306. Investigative Reporting. (3)** Special problems and assignments in in-depth investigative reporting. Prerequisites: JOUR 302 and 304.

**JOUR 308. Press Photography. (3)** Experience in professional press photography. Basic darkroom techniques in developing, enlarging, and printing. Principles and procedures in using pictures as an editorial medium.

**JOUR 310. Mass Media Advertising and Audience. (3)** Fundamentals of broadcast, print, and public relations advertising, promotion and sales, including market research, media buying, and campaigns.

**JOUR 312. Advertising Copy and Layout. (4)** Ideas and their translation into persuasive words and pictures. Principles and techniques of copy and layouts. Types and functions of advertising. Prerequisite: JOUR 302.

**JOUR 405. News Editing. (3)** Editing copy, writing headlines, designing newspaper layout. Prerequisite: JOUR 302.

**JOUR 410. Editorial Writing. (3)** Critical analysis of structure and content of newspaper editorials; practice in writing editorials and columns. Prerequisite: JOUR 405.

**JOUR 412. Advanced Advertising Copy and Layout. (3)** Continuation of study in copy and layout with emphasis on creative projects.

**JOUR 420. Broadcast Journalism. (3)** A course which deals with the preparation and production of news and documentaries for radio and television. Prerequisite: JOUR 302 and SPCH 364 or permission of instructor.

**JOUR 440. Feature Writing. (3)** Instruction and practice in writing feature articles. Prerequisite: JOUR 302 or permission of instructor.

**JOUR 442. Magazine Writing. (3)** Study and practice in writing nonfiction articles for consumer or trade magazines. Analysis of current magazine markets and trends. Prerequisite: JOUR 302 or permission of instructor. JOUR 440 recommended.

**JOUR 452. Reviewing and Criticism. (3)** Instruction and practice in reviewing entertainment and the arts. Emphasis on film criticism and one or more of the following: theatre, literature, music, dance, art. Prerequisite: JOUR 302.

**JOUR 454. Specialized Publications. (3)** Business and industrial publications. Writing and editing for special interest newspapers and magazines in such fields as agriculture, business and industry, engineering, home economics and music. Prerequisite: JOUR 302.

**JOUR 460. Special Topics. (3)** Scope of subject matter to be determined by students and instructor. Prerequisites: JOUR 302 and permission of instructor.

**JOUR 470. Campus Magazine Workshop. (3)** Practical experience in writing, editing, photography and layout for campus publications. Prerequisite: Upper-division status in journalism; permission of instructor.

**JOUR 480. Independent Projects. (3)** Supervised individual study, media experience or research. May be taken twice for credit.





## DEPARTMENT OF CRIMINAL JUSTICE

**Bruce Mallard,  
Ph.D., Head**

The Department of Criminal Justice offers a program leading to the degree of Bachelor of Science in correctional services. It focuses on the preparation of students to assume responsible positions in agencies and institutions in the area of crime prevention and treatment. Through the research activities of faculty and students, the generation and dissemination of new knowledge is emphasized. The curriculum is designed to offer the student a substantial liberal arts education with emphasis on the behavioral sciences in general and criminal justice in particular. The present emphasis of the Department is in the area of corrections.

Any student admitted to undergraduate study at the University is eligible to major in Criminal Justice. In addition, special students and part-time in-service criminal justice personnel are welcomed. Special attention is given to those students already working in criminal justice agencies and institutions, and a broad range of courses is offered in the evening.

The Criminal Justice major requirements include a total of 44 semester hours with at least 33 semester hours at the 300-400 level. Included in this total is a field experience requirement of 12 semester hours for all majors. This course is optional for police officers who have completed basic training at a city or state police academy. No minor is required for criminal justice majors since 18 semester hours of psychology (including any 9 semester hours beyond general psychology except education-oriented courses) and 15 semester hours of sociology (including any 9 semester hours beyond introduction to sociology) are required of all majors.

All students must complete a 3 semester hour course in statistics. This course may be taken in either the sociology or psychology department but does not count toward fulfillment of the substance sociology or psychology requirements.

All students will be expected to show evidence of satisfactory communications skills. Speaking or writing difficulties will necessitate extra compensatory work to eliminate the deficiency. In addition, all students will be required to complete successfully a course in criminal justice technical writing unless exempted by the head of the department of Criminal Justice.

Those wishing to minor in Criminal Justice will be required to complete successfully the introductory course (C.J. 200), the three core courses (201, 202, & 203), and any three approved upper level courses.

Since this department is relatively new at the University, all requirements are constantly under study and are subject to change from time to time. Students are therefore urged to keep in close contact with the Department through their advisers.

### CAREER OPPORTUNITIES IN CRIMINAL JUSTICE

Criminal Justice majors enter a number of fields after graduation and have generally found a substantial demand for persons from their field of study. Many, of course, continue their studies in graduate school in the fields of law, psychology, social work, guidance and counseling, and criminal justice. Those students who begin working after graduation work in areas like law enforcement, either federal, state, or local, corrections as prison or juvenile institution counselors or adult or juvenile probation and parole officers, or as counselors and case workers in other areas related to criminal justice like drug and alcohol counseling and treatment or in half-way houses or juvenile foster homes.

### CURRICULUM FOR A MAJOR IN CRIMINAL JUSTICE

FRESHMAN YEAR	Credit Hours	
	Fall	Spring
MATH 111-112 .....	4	3
ENG 101-102 .....	3	3
SCI 121-122 .....	3	3
HIST 201-202 .....	3	3
PSY 201 .....		3
HUM .....		2
CJ 200 .....	3	
PE and AFROTC .....	1	1
	17	18

SOPHOMORE YEAR	Credit Hours	
	Fall	Spring
CJ 201-202 .....	3	3
CJ 203 .....		3
SOC 211, 330 .....	3	3
ENG 211-212 .....	3	3
PSY 202 .....	3	
PSY 321 .....	3	
HUM .....	2	2
ENG 310 .....		3
PE or AFROTC .....	1	1
	18	18

JUNIOR YEAR	Credit Hours	
	Fall	Spring
PSY 311 or SOC 300 .....	3	
Elective .....		3
PSY 462 .....	3	
PSY 341 or PSY 351 .....	3	
SOC Elec. 300 Level .....	3	3
SOC Elec. 300 Level .....		3
CJ 300 .....	3	
CJ Elec. .....	3	
Elec. 300 Level .....	3	3
	18	15

SENIOR	Credit Hours	
	Fall	Spring
CJ 400 .....	12	
CJ 450 .....	3	
CJ Elec. 300-400 level .....		3
CJ Elec. 300-400 level .....		3
CJ Elec. 300-400 level .....		3
Elec. 300-400 level .....		3
Elec. 300-400 level .....		3
	15	15

### COURSE OFFERINGS

#### Required Courses:

**C.J. 200 Introduction to Criminal Justice Studies. (2)** A preliminary examination of the entire criminal justice system. It emphasizes the understanding of basic concepts in police science, correctional services studies, the law and our legal system, and the elements of the scientific method and research techniques. It also functions as an introduction to the orientation and demands of the Tennessee State University Department of Criminal Justice.

**C.J. 201. The American Police System. (3)** An intensive study of findings and concepts in the area of police science. It covers law enforcement agencies, their procedures, and their problems. There is discussion of police-community relations and the FBI. History emphasized.

**C.J. 202. The American Legal System. (3)** An intensive study of the concepts and findings of research concerning the functioning and the structure of the American legal system. Its history and development are stressed, and its place in the entire criminal justice system is discussed. Elements of constitutional criminal law are introduced. Problems such as crowded dockets, plea bargaining, and bail are discussed.

**C.J. 203. The American Correctional System. (3)** An intensive study of the concepts and the findings of research in the area of corrections. In addition to consideration of the history and development of our correctional system, various techniques of correction are considered. The relationship of society and its norms to the operations of such systems will not be neglected.

**C.J. 300. Research Methods. (3)** An intensive survey of the various research methods appropriate to criminal justice studies. Special emphasis is given to the consideration of logic, design, and importance of research for correctional practitioners. In addition to the development of research skills, a purpose of this course is to develop the student's ability to read critically and to evaluate proposals for change. Prerequisite: Math 111 and Psy 311 or Soc 300.

**C.J. 400. Practicum. (12)** This field experience consists of nearly full-time work in an appropriate institution of agency. It also involves intensive weekly discussions of problems that arise. Usual enrollment time is the student's senior year of study.

**C.J. 450. Senior Project. (3)** This course involves the preparation of an acceptable piece of research in the area of criminal justice. Prerequisite: C.J. 300.



## ELECTIVE COURSES

### C.J. 301. Court Procedures and Mechanics.

(3) An intensive study of courtroom case preparation, officer demeanor in court, effective presentation of evidence, trial procedure, use of written notes, officer appearance, and reaction to cross examination. (e)

### C.J. 302. Constitutional Criminal Law.

(3) Discussion of criminal law and procedure. Discussion of constitutional law as it impinges upon the legal system and the crime. Review of the relevant constitutional criminal cases before the various courts of Appeals and the United States Supreme Court. (e)

### C.J. 303. Incidence of Crime.

(3) Intensive discussion of the problems involved with crime statistics. Reviews UNIFORM CRIME REPORTS and discusses relevant studies. Careful attention is devoted to the concept of unreported crime. (e)

### C.J. 304. Criminal Typology.

(3) Intensive discussion of the types of crimes. Consideration will be given to the various bases for the division of crimes into different categories. In addition, there will be an intensive examination of the specific research findings regarding crimes such as rape, robbery, murder, etc. (e)

### C.J. 305. Deviance and Control.

(3) A sociological discussion of the nature and role of deviance in a society. The various types of deviance will be considered and the nature of the relationship between deviance and the controlling and producing forces of society will be discussed. The relationship of deviance to crime will also be considered. (e)

### C.J. 306. Introduction to the Philosophy of Law.

(3) The philosophical development of the concept of law from the Pre-Greek era to the present (Babylonian, Greek, Roman, Germanic, and English systems) with emphasis on the more important philosophical ideas that have led to the present American legal system. (e)

### C.J. 307. The Study of Law.

(3) An in depth analysis of the Socratic method and Case method of legal studies and the organization and function of law schools. The course is geared toward and should be taken by only those students interested in pursuing a career in law. (e)

### C.J. 308. Police Patrol and Services.

(3) A study of the organization, administration, and supervision of patrol function. Responsibilities, techniques and methods of police and patrol will be discussed. Various services and public assistance offered by police organizations will be emphasized. (e)

### C.J. 309. Traffic Investigation and Control.

(3) A study of the development and need for traffic laws with primary attention focused upon the Uniform Motor Vehicle Code and Model Traffic Ordinances, including use and implementation. The maintenance and preparation of an adequate records system relative to traffic safety is examined. (e)

### C.J. 301. Criminal Theory.

(3) A survey of the various theories which have been advanced over the years about the causation of crime. Biological, sociological, psychological,

and other theories will be examined along with relevant research findings. (e)

### C.J. 311 Police Systems.

(3) Course entails police systems established in America and abroad with emphasis on functions and activities, divisions and subdivisions with responsibilities and functions of each. Contrasts in structure, with a view of transitions, are discussed. (e)

### C.J. 313. Fundamentals of Guidance Counseling.

(3) An intensive introduction to counseling with special emphasis upon the nature and problems of correctional guidance counseling. Attention is devoted to the recognition and diagnosis of psychological problems as well as development of acceptable counseling methodology. (3).

### C.J. 321. Juvenile Delinquency.

(3) An introductory course but is rather an intensive study of the basic ideas of criminology as applied to juveniles. Attention is devoted to the development and impact of the juvenile court system. (e)

### C.J. 322. Penal Institutions and Treatment Methods.

(3) Intensive discussion of the methods of corrections involving prisons, jails, and other places of incarceration. Special emphasis will be placed on the inmate of community, treatment-custodial conflicts, and the utility (or lack of utility) of such institutions. (e)

### C.J. 323. Community Based Treatment Methods.

(3) Intensive study of probation, parole, Work-release, and other correctional methods which involve the inmate in his community rather than under incarceration. Merits and defects of such programs will be examined. (e)

### C.J. 330. Police Administration I.

(3) An examination of the principles of organization, administration, and functions of police departments. An evaluation of personnel policies, divisions, operations, command policies, and evaluation of department as a whole. (e)

### C.J. 331. Police Administration II.

(3) A detailed study of the organization, administration and function of the police department. The designing of policies and a study of the arrangement within a department of specific operations and commands will be emphasized. (e)

### C.J. 401. Independent Study.

(3) For the student who shows exceptional promise, this course will consist of a research project or intensive reading program especially designed for the student. It is anticipated that only those students whose papers show reasonable probability of a new contribution to knowledge will be enrolled. (e)

### C.J. 405. Introduction to Criminalistics.

(3) A course designed to give the student a basic knowledge of crime scene protection, collection, preservation, and identification of evidence, including proper search, dusting latent prints, casting, fingerprint classification, use of the crime laboratory and crime detection and prosecution. (e)

### C.J. 420. Seminar in Law Enforcement.

(3) Review and synthesis of basic principles, practices and procedures. Visitation to operating police organization. Includes final prepara-

tion for employment in the law enforcement area. (e)

### C.J. 421. Sociology of Law.

(3) A discussion of the role of the legal system in our society. There will be consideration of the actual effects of certain types of legislation. Other topics will include conflict resolution, the problem of a pluralistic society, the nature of the law, etc. (e)

### C.J. 422. White Collar Crime.

(3) A discussion of the incidence and problems with this major type of criminality. Topics will range from tax evasion and business crimes to political corruption and bribes. (e)

### C.J. 430. Special Topics.

(3) This course will be taught from time to time as faculty expertise and student interest warrant in such areas as police community relations, behavior modification in corrections, street laws, etc. (e)

## DEPARTMENT OF ENGLISH

Clayton Reeve, Ph.D.,  
Head

The Department of English provides general education in composition, language, and literature for all students enrolled in the University. In addition, it offers more advanced education in these areas to students who wish to become specialists in the field. The Department also offers a humanistic education in composition, language, and literature to students who plan to enter one of the professions, such as law, medicine, business, writing, or publishing, and who wish to acquire a liberal education along with their professional training.

Four objectives have been established for students in the Department of English:

1. To acquire a command of the English language that enables the student both to read with understanding and enjoyment and to express ideas, in writing and in oral discussion, about that which is read.



2. To appreciate the ideas and experiences of the great literary figures of the world through a study of their work and their culture.
3. To evaluate literary material through a critical analysis of its structure and thought, as well as its more purely aesthetic qualities.
4. To acquire a foundation in those areas of composition, language, and literature required for the bachelor's degree.

The Department offers two undergraduate degrees, the Bachelor of Arts and the Bachelor of Science degree, in either of two distinct courses of study. The student may follow the general degree program, with a concentration in English, described in this section of the catalog under the heading, "General Degree Program," or he or she may pursue the specialized course of study described below. In addition, the Department offers an interdisciplinary degree sequence in English-Journalism, which is described following the listing of English courses.

The major in English leads to either the Bachelor of Arts degree, with or without teacher certification, or the Bachelor of Science degree, with or without teacher certification. Each undergraduate major must complete a minimum of 132 semester hours of work for the bachelor's degree. In accord with University requirements, sixty of the 132 hours must be in 300- or 400-level courses.

Students who pursue the Bachelor of Arts degree with or without teacher certification and who have completed no units of a foreign language in high school must complete four semesters of work in one foreign language, beginning with the introductory course in that language. Students who earn the Bachelor of Arts degree with or without teacher certification but who completed two years of a foreign language in high school must complete two semesters in that language, beginning with the sophomore course in that language.

Those who seek the Bachelor of Science degree with or without teacher certification must complete two semesters of foreign language, regardless of whether they have had a foreign language in high school. The Department recommends that students begin the language in the freshman year.

Candidates for the Bachelor of Arts degree or the Bachelor of Science degree with or without teacher certification must complete, in addition to the foreign language requirements and the General Education Core, twenty-four semester hours of these required courses:

ENG 300 (Expository Writing) .....	3
ENG 361 and 362 (American Literature).....	6
ENG 300-400 (Elective in British Literature, excluding Shakespeare) .....	3
ENG 400 (Senior Seminar) .....	3
ENG 410 (History of the English Language) .....	3
ENG 411 (Current English) or 412 (Modern Grammar) .....	3
ENG 431 or 432 (Shakespeare) .....	3
	<hr/> 24

English majors must take English 211D and 212D, English Literature, as part of the General Education Core. If a student declares an English major after he has completed the sophomore literature requirement, and if he did not take 211D and 212D, he will be asked to take additional upper-division courses in British literature to compensate.

Candidates for the B.A. or the B.S. without teacher certification must take English 100 and Speech 220, in addition to the twenty-four hours of upper-division English courses, the foreign language requirement, and the General Education Core.

Students who pursue the B.A. or the B.S. degree with teacher certification must complete the Professional Education Core for Secondary Majors, in addition to the twenty-four hours of upper-division English outlined above, the foreign language requirement, the General Education Core, English 100, English 372, and Speech 220. The Professional Education Core consists of Education 201, 301, 387, 465, 472, and 491; English 370; and Psychology 242 and 312. Candidates must also pass several tests required for teacher certification.

The Department encourages English majors to prepare for a wide variety of careers. To this end, it suggests that majors consider a second major or a minor in such areas as the following: Business, Communication, History, Modern Foreign Languages, and Psychology. Moreover, English is one of the most valuable majors for pre-law and pre-medicine students.

The Department also encourages students from other disciplines to choose a second major or minor in English, since English helps to develop many of the most useful skills in any professional area. A minor in English includes a minimum of eighteen hours in addition to English 101-102. The required courses for a minor are ENG 211-212 (preferably 211D-212D), ENG 361 or 362, ENG 410, ENG 411 or 412, and ENG 431 or 432.

To encourage both English majors and nonmajors to attain excellence in scholarship and leadership, the Department offers two scholarships and three awards and administers the Crawford B. Lindsay Scholarship Assistance Awards, which the Tennessee Alumni Chapter gives to two graduating seniors from Tennessee high schools who have elected to major in English at Tennessee State.

The Department scholarships and awards are The Laura M. Averitte Scholarships and The Alma Dunn Jones Essay Awards. The Laura M. Averitte Scholarships are given each spring to the graduating English major and the second-semester freshman English major with the highest scholastic average and the outstanding record of leadership and service. The Alma Dunn Jones Essay Awards are given each spring to the three freshmen enrolled in Freshman English 102, majors or nonmajors, who write the best essays in the Alma Dunn Jones Essay Contest.

### BACHELOR OF ARTS DEGREE PROGRAM (Without Teacher Certification)

FRESHMAN YEAR	Credit Hours	
	Fall	Spring
ENG 101-102 .....	3	3
French, German or Spanish .....	4	4
HIST 201-202 .....	3	3
MATH 111 or 161 .....	4	
MUS 131 or ART 133 .....		2
ENG 100 (Orientation) .....	1	
PE (2-Digit) or AERO .....	1	1
SPCH 220 .....		3
EDRD 100 (Reading, if necessary) .....	(3)	
	<hr/> 16	<hr/> 16
SOPHOMORE YEAR	Credit Hours	
	Fall	Spring
ENG 211D-212D .....	3	3
French, German or Spanish .....	3	3
MUS 131 or ART 133 .....		2
SOC SCI Elective .....	3	
ENG 300 .....	3	
SCI/ BIO/ CHEM .....	3	3
PE (2-Digit) or AERO .....	1	1
ENG 201 (if necessary) .....	3	
Electives (300 or 400 level) .....		6
	<hr/> 16	<hr/> 18
JUNIOR YEAR	Credit Hours	
	Fall	Spring
ENG 361-362 .....	3	3
ENG 410 .....	3	
ENG 411 or 412 .....		3
ENG 300 or 400 Elective (excluding Shakespeare) .....	3	
Electives (300 or 400 level) .....	6	12
	<hr/> 15	<hr/> 18
SENIOR YEAR	Credit Hours	
	Fall	Spring
ENG 400 .....	3	
ENG 431 or 432 .....	3	
Electives (300 or 400 level) .....	12	15
	<hr/> 18	<hr/> 15



**BACHELOR OF ARTS DEGREE PROGRAM**  
**(With Teacher Certification)**

FRESHMAN YEAR	Credit Hours	
	Fall	Spring
ENG 101-102 .....	3	3
French, German or Spanish .....	4	4
HIST 201-202 .....	3	3
MATH 111 or 161 .....	4	
HEALTH 151 (Personal Hygiene) .....		2
ENG 100 (Orientation) .....	1	
PE (2-Digit) or AERO .....	1	1
MUS 131 or ART 133 .....		2
SPCH 220 .....		3
EDRD 100 (Reading, if necessary) .....	(3)	
	16	18

SOPHOMORE YEAR	Credit Hours	
	Fall	Spring
ENG 211D-212D .....	3	3
French, German or Spanish .....	3	3
SCI/ BIO/ CHEM .....	3	3
MUS 131 or ART 133 .....	2	
ENG 300 .....	3	
SOC SCI Elective .....		3
EDCI 201 .....	3	
PSY 242 .....		3
ENG 201 (if necessary) .....	(3)	
PE (2-Digit) or AERO .....	1	1
	18	16

JUNIOR YEAR	Credit Hours	
	Fall	Spring
ENG 361-362 .....	3	3
ENG 410 .....	3	
ENG 411 or 412 .....		3
ENG 300 or 400 Elective (excluding Shakespeare) .....	3	
ENG 372 .....	3	
EDCI 301 .....	3	
EDCI 387 .....		3
PSY 312 .....		3
Electives (300 or 400 level) .....	3	6
	18	18

SENIOR YEAR	Credit Hours	
	Fall	Spring
ENG 400 .....	3	
ENG 431 or 432 .....	3	
ENG 370 .....		3
EDSE 465 .....	3	
EDRD 491 .....		3
EDCI 472 .....		9
Electives (300 or 400 level) .....	4	
	13	15

**BACHELOR OF SCIENCE DEGREE PROGRAM**  
**(Without Teacher Certification)**

FRESHMAN YEAR	Credit Hours	
	Fall	Spring
ENG 101-102 .....	3	3
French, German or Spanish .....	4	4
HIST 201-202 .....	3	3
MATH 111 or 161 .....	4	
MUS 131 or ART 133 .....		2
EDRD 100 (Reading, if necessary) .....	(3)	
SPCH 220 .....		3
PE (2-Digit) or AERO .....	1	1
ENG 100 (Orientation) .....	1	
	16	16

SOPHOMORE YEAR	Credit Hours	
	Fall	Spring
ENG 211D-212D .....	3	3
SCI/ BIO/ CHEM .....	3	3
MUS 131 or ART 133 .....	2	
ENG 300 .....	3	
SOC SCI Elective .....	3	
ENG 201 (if necessary) .....	(3)	
PE (2-Digit) or AERO .....	1	1
Elective (300 or 400 level) .....	3	9
	18	16

JUNIOR YEAR	Credit Hours	
	Fall	Spring
ENG 361-362 .....	3	3
ENG 410 .....	3	
ENG 411 or 412 .....		3
ENG 300 or 400 Elective (excluding Shakespeare) .....	3	
Electives (300 or 400 level) .....	6	12
	15	18

SENIOR YEAR	Credit Hours	
	Fall	Spring
ENG 400 .....	3	
ENG 431 or 432 .....	3	
Electives (300 or 400 level) .....	12	15
	18	15

**BACHELOR OF SCIENCE DEGREE PROGRAM**  
**(With Teacher Certification)**

FRESHMAN YEAR	Credit Hours	
	Fall	Spring
ENG 101-102 .....	3	3
French, German or Spanish .....	4	4
HIST 201-202 .....	3	3
MATH 111 or 161 .....	4	
MUS 131 or ART 133 .....		2
EDRD 100 (Reading, if necessary) .....	(3)	
SPCH 220 .....		3
HEA 151 .....		2
PE (2-Digit) or AERO .....	1	1
ENG 100 (Orientation) .....	1	
	16	18

SOPHOMORE YEAR	Credit Hours	
	Fall	Spring
ENG 211D-212D .....	3	3
SCI/ BIO/ CHEM .....	3	3
MUS 131 or ART 133 .....	2	
ENG 300 .....	3	
SOC SCI Elective .....		3
EDCI 201 .....	3	
PSY 242 .....		3
ENG 201 (if necessary) .....	(3)	
Electives (300 or 400) .....	3	3
PE (2-Digit) or AERO .....	1	1
	18	16

JUNIOR YEAR	Credit Hours	
	Fall	Spring
ENG 361-362 .....	3	3
ENG 410 .....	3	
ENG 411 or 412 .....		3
ENG 372 .....	3	
ENG 300 or 400 Elective (excluding Shakespeare) .....	3	
EDCI 301 .....	3	
EDCI 387 .....		3
PSY 312 .....		3
Electives (300 or 400 level) .....	3	6
	18	18

SENIOR YEAR	Credit Hours	
	Fall	Spring
ENG 400 .....	3	
ENG 431 or 432 .....	3	
ENG 370 .....		3
EDSE 465 .....	3	
EDRD 491 .....		3
EDCI 472 .....		9
Electives (300 or 400 level) .....	4	
	13	15

**COURSE OFFERINGS**  
**ENGLISH (ENG)**

**ENG 000. Writing Clinic. (0)** The Writing Clinic is open without charge to all students enrolled in the University who are having writing difficulties. Most instruction is on an individual basis.

**ENG 001. English Composition for Foreign Students. (0)** An introduction to the formal aspects of written English in preparation for English 101. The course presupposes training in the English language.

**ENG 098.\* Basic English Skills. (3)** Development of language skills, with concentration on understanding sentences and paragraphs, spelling and vocabulary improvement. Not offered for degree credit. Students who have previously passed English 099 or English 101 may not earn grade points in this course.

**ENG 099.\* Basic Composition. (3)** Reading and writing sentences, paragraphs, and short essays; studies in sentence structure and grammar. Not offered for degree credit. Students who have previously passed English 101 may not earn grade points in this course.

\*English 098 and 099 carry institutional credit only. Grades earned in these courses (with the exceptions noted above) will be computed into the student's grade point average, but none of the courses earns hours towards a degree.

**ENG 100. Freshman Orientation. (1)** An introduction to college life and the disciplines of language and literature. The course surveys the offerings in the English curriculum, introduces methods of study in the field, and familiarizes the student with careers for the English major.

**ENG 101. Freshman English. (3)** An introduction to the fundamentals of written composition and communication through the study of illustrative essays, as well as an introduction to the reading and critical analysis of essays. Grammar and mechanics, insofar as they are an integral part of developing proficiency in writing, are covered in the course. Successful completion of 101 is a prerequisite for English 102.

**ENG 102. Freshman English. (3)** An introduction to more advanced techniques of composition through the study of literature. The analysis and explication of literature serve as topics for discussion, study, and writing of themes. Special attention is paid to the writing of the literary review and the research paper. Prerequisite: successful completion of English 101.

**ENG 101H-102H. Honors Freshman English. (3-3)** An Honors Course in Freshman English designed for students able to work at an ad-



vanced level. Class enrollment is restricted to students in the Honors Program

**ENG 101S-102S. English in Special Programs. (3-3)** English for students in University-approved Special Programs funded by the Federal Government or other agencies. Admission is restricted by conditions that govern the operations of those programs.

**ENG 201. Problems in Composition. (3)** Attention to materials that will help the student overcome his specific problems in written expression. Required of all students who score beneath the cut-off point on the English Proficiency Examination (see Index).

**ENG 207. Best Sellers: Fiction and Nonfiction. (3)** Current and recent best sellers in fiction and nonfiction, considered as literature.

**ENG 208. Film and Theater in Town. (3)** Analysis of current film and plays.

**ENG 211-212. Sophomore Literature. (3-3)** A study of literary works with a variety of foci and perspectives. All of the following 211-212 courses satisfy the sophomore literature requirement of the General Education Core. A student may take any combination of 211 and 212 courses, provided one course is a 211 and the other a 212.

**ENG 211-212. American Literature. (3-3)** A survey of American literature from the first European settlements to the present time. The first semester covers from the beginning of the Civil War, and the second covers the period since the Civil War.

**ENG 211A-212A. World Literature. (3-3)** A survey of world literature from the beginnings in the Far East and Middle East until the present time. The first semester treats literature through the Renaissance, and the second treats the Renaissance to the present.

**ENG 211B-212B. Literary Genres. (3-3)** An approach to literature from the point of view of the genre, or type of work to be studied. The first semester takes up the short story and the novel, the second poetry and drama.

**ENG 211C-212C. Black Arts and Literature. (3-3)** A study of the contributions of Black artists and writers to world culture, especially American culture. The first semester treats oral traditions and music; the second semester takes up literature.

**ENG 211D-212D. English Literature. (3-3)** A survey of English literature from its origins until the present. The first semester concludes with the end of the eighteenth century, and the second semester covers the period since 1800. Required of English majors, but open to all students.

**ENG 211H-212H. Honors World Literature. (3-3)** An analytical reading of selected poetry, prose, and drama from the nations of the world. The subject matter of both semesters is arranged chronologically, with that of the first ranging from the Ancient Chinese through the Renaissance; and that of the second, from the Age of Classicism and Reason of the twentieth century. Limited to students in the Honors Program.

**ENG 221. English Etymology. (1)** A study of the origin and derivation of words, especially Greek and Latin stems most commonly found in the English language, with special attention to words in scientific and technical vocabularies.

**ENG 300. Expository Writing. (3)** The reading and examination of essays representing the major expository types, with particular attention to rhetorical principles, style, and structure, resulting in the writing of essays illustrating these types. The final project is the preparation of the research report, with emphasis on the collection of materials, analysis, and organization.

**ENG 301. Business English. (3)** A course in business correspondence, emphasizing the different roles of communication in management.

**ENG 310. Technical Report Writing. (3)** A study of fundamentals of written reports in a variety of professional fields, with emphasis on grammar, sentence structure, and style, as well as on specialized techniques. 310E focuses on reports required in professional engineering. 310S is the study and preparation of forms and reports required of social workers. 310CJ is the study and preparation of forms and reports required of students majoring in Criminal Justice. Acquaintance with documents of various agencies is stressed.

**ENG 311. Creative Writing. (3)** A workshop in short story writing. The course examines the techniques and problems involved in writing the short story and places emphasis on the use of the senses and the writing about the experience of living.

**ENG 312. Creative Writing. (3)** A workshop in writing poetry. The course examines the techniques involved in writing poetry, placing emphasis on the writing of varied poetic types and relating poetry to other forms of art.

**ENG 314. Popular Fiction. (3)** A study of such popular fiction as the western, the fantasy, the thriller, and the historical romance. Emphasis is on form, appeal, and statements about society.

**ENG 315. The Film. (3)** A study of the films: their makers, their message, and their appeal. Students will not only view films but also read articles and books—books which have been made into films and films which have been made into books.

**ENG 320. Children's Literature. (3)** (Offered also as Education.) A course offering prospective teachers of the primary grades an opportunity to become familiar with literature suited to the needs and tastes of children. Principles that underlie selection of children's literature for classrooms and libraries are considered.

**ENG 331. British Literature from the Renaissance to the Restoration. (3)** A study of representative selections from 1500 to 1660 with concentration on non-dramatic literature.

**ENG 332. Literature of the Restoration and Eighteenth Century. (3)** A study of selected poetry, prose, and drama from the ages of Dryden, Pope, and Johnson.

**ENG 333. Eighteenth-Century Fiction and Journalism. (3)** A study of the attempts of

journalists and novelists to create myths or moral models for their age in a series of social and cultural fictions. Readings in Addison and Steele, Johnson, Fielding, and Richardson.

**ENG 341. Literature of the Romantic Movement. (3)** A study of representative British selections from 1798 to 1832. Attention is given both to poetry and prose.

**ENG 342. The Victorian Era. (3)** A study of nonfiction prose writers such as Carlyle, Mill, and Arnold; and of poets such as Tennyson, Browning, and Arnold. Some assignments will be made in the major novelists such as Dickens, Thackeray, and Eliot.

**ENG 351-352. Twentieth-Century British Literature. (3-3)** A study of the major trends in poetry, drama, and the novel of the current century. Emphasis is placed on themes, techniques, and social criticism. Representative British, Irish, and Commonwealth writers are included.

**ENG 353. Modern British Poetry. (3)** Selections from the works of Hopkins, Yeats, Eliot, Thomas, and others.

**ENG 361. American Literature of the Nineteenth Century. (3)** A study of major American writers and literary movements, including such writers as Emerson, Thoreau, Hawthorne, Melville, Twain, and Crane, and such movements as romanticism, transcendentalism, realism, and naturalism.

**ENG 362. American Literature of the Twentieth Century. (3)** A study of literary trends in the present century, with emphasis on such major figures as Dreiser, Frost, Eliot, Faulkner, Fitzgerald, Ellison, Lowell, Baldwin, and Bellow.

**ENG 363. The American Novel. (3)** A study of selected works designed to reflect formal developments in the novel, as well as intellectual and moral concerns of the American people.

**ENG 364. Literature of Negro Life. (3)** A study of Negro literature from its inception in America to current times. Particular emphasis is placed on biography, poetry, the essay, and short fiction.

**ENG 365. The Contemporary Black Novelist. (3)** A study of novelists such as James Baldwin, Ralph Ellison, Margaret Walker, Toni Morrison, and John Killens, in terms of literary merit and social milieu.

**ENG 367. The Short Story. (3)** Emphasis on the origin and growth of the American short story.

**ENG 368. Contemporary American Poetry. (3)** Poetry from 1940 to present.

**ENG 369. Contemporary American Fiction. (3)** Novels, short stories, and experimental fiction, 1940 to the present, by such authors as Ellison, Barth, Heller, Nabokov, and Pynchon.

**ENG 370. Methods of Teaching High School English. (3)** A course in the methods of teaching English in the secondary school. Required of English majors in the Teacher Education Program. Field Experience required.



**ENG 372. Adolescent Literature. (3)** A survey of literature relevant to the interests and concerns of young adults. Required of English majors enrolled in the Teacher Education Program.

**ENG 380. African and West Indian Literature. (3)** An introductory course in the literature of Africa and the West Indies. Authors include Chinua Achebe, Wole Soyinka, James Ngugi, Mongo Beti, George Lamming, Camara Laye, and Jacques Roumain.

**ENG 381. Comparative Literature: Ancient. (3)** Images of classical civilization from Homer to fifth-century Athens to Augustan Rome. Emphasis on epic and tragedy, with extensive readings in *The Iliad*, *The Odyssey*, the Greek tragedies, and *The Aeneid*.

**ENG 382. The Literature of the English Bible. (3)** The Bible considered as literature, with attention to historical backgrounds and textual problems.

**ENG 383. Superstition, Science and Mysticism. (3)** An analysis of man's attempts to explain experiences and phenomena from causal and intentional points of view. The course embraces three means used by man in his attempt to explain ultimate reality.

**ENG 386. Women in Literature. (3)** A course designed to investigate the image of woman in literature as it relates to sexual roles, judgments, choices, and equality; and to broaden a student's knowledge of some of the values, life styles, goals and achievements of women—in the past and today.

**ENG 400. Senior Seminar. (3)** Designed to complete the English major by inquiring into the purposes and methods of the liberal arts in general and literary study in particular. Attention is paid to the resources for literary scholarship and criticism. Required of all English majors.

**ENG 401. Special Topics. (3)** Student- or faculty-generated course, with subject matter to be determined by students and instructor. May be repeated, for a maximum of six hours.

**ENG 402. Special Topics in World Literature. (3)** Studies in world literature in translation. Subject matter to be determined by the instructor with the approval of the English faculty. May be repeated once, for a maximum of six hours.

**ENG 410. History of the English Language. (3)** A study of the development of the English language from the beginning to modern times. Some attention is given to phonetics and to the elementary principles of linguistics. Required of all English majors.

**ENG 411. Current English. (3)** New trends in teaching English and their relationship to significant trends in the past. Students will also develop projects that will be used as supplementary texts in the course.

**ENG 412. Modern English Grammar. (3)** An introduction to the "new" theories of grammar and an application of those theories as a tool for analyzing literature and composition.

**ENG 413. Advanced English Grammar. (3)** Traditional approaches to grammar.

**ENG 420. Chaucer. (3)** An introduction to the works of Chaucer, with emphasis on the background of the age and on the development of Chaucer as a literary artist.

**ENG 421. English Novel. (3)** A selection of English novels from the eighteenth century to the present.

**ENG 422. The Continental Novel. (3)** A study of selected Continental novels with attention to the social background in which they were written.

**ENG 423. Literature of the Middle Ages. (3)** Studies in the prose and poetry of the Middle Ages, including *Beowulf* and works of the *Pearl*-poet, Langland, and Malory.

**ENG 424. The Major Poetry of Edmund Spenser. (3)** A primary concentration on *The Faerie Queene*, with attention to other works.

**ENG 426. The Contemporary Novel—from 1945 to The Present. (3)** An introduction to the major novelists and trends in the novel since 1945. Novelists forming the core of the course are Gunter Grass, Vladimir Nabokov, John Hawkes, Ralph Ellison, Samuel Beckett, William Styron.

**ENG 431-432. Shakespeare. (3-3)** A study of the principal histories, comedies, and tragedies of Shakespeare, with attention to the cultural background of the Elizabethan period.

**ENG 433. The Metaphysicals. (3)** A study of the work of Donne, Herbert, Crashaw, Vaughn, and other representatives of the "Metaphysical School of Poetry."

**ENG 434. Milton and Bunyan. (3)** A study of John Milton's minor poems, important prose tracts, *Paradise Lost*, *Paradise Regained*, and *Samson Agonistes*; and of Bunyan's *Pilgrim's Progress*.

**ENG 441. Nineteenth-Century English Novel. (3)** A selection from the major writers of the period, such as Scott, Dickens, Eliot, Thackeray, Trollope, the Brontës, Hardy and Galsworthy.

**ENG 451. The English Novel: Twentieth Century. (3)** Selections from the works of Conrad, Forster, Lawrence, Joyce, Woolf, and others.

**ENG 480. Introduction to Literary Criticism. (3)** Major critical doctrines from antiquity to the present, with emphasis on twentieth-century movements.

**ENG 481. Southern Literature. (3)** Survey of Southern literature from William Byrd to the fugitives to more recent figures such as Eudora Welty, Flannery O'Connor, and Walker Percy.

**ENG 482. Literature of the New Journalism. (3)** An examination of the literary impact of the New Journalism and the use of novelistic techniques in reporting events. Attention to such practitioners as Capote, Wolfe, Mailer, and Hunter S. Thompson.

**ENG 490. Undergraduate Readings and Research. (3)** Individual study and research under faculty guidance. May be repeated once, for a total of six hours.

## ENGLISH-JOURNALISM CURRICULUM

The English-Journalism sequence is a career-oriented curriculum designed for students whose primary interest is writing (either fiction or nonfiction) and who hope to be employed in journalism or publishing. English-Journalism students receive either a Bachelor of Arts or Bachelor of Science degree in Arts and Sciences, with a concentration in the Humanities. They follow the degree requirements described under the heading, "General Degree Program," within the School of Arts and Sciences.

Working within general degree requirements, students select appropriate courses, primarily from the Departments of English and Communication, to design a program leading to careers in writing, editing, publishing, advertising, public relations, or newspaper reporting. Flexibility and development of diverse skills are encouraged. Students are urged to include courses in at least two complementary fields. For instance, students whose main interest is nonfiction writing might take advanced courses in editing and newspaper reporting in addition to relevant courses in literary criticism, feature and magazine writing, literature of the new journalism, and reviewing and criticism. Students interested mainly in fiction writing might add any of the above courses to courses in creative writing as a means of broadening their scope. In addition, students interested in advertising or public relations will find appropriate combinations of writing courses, both fiction and nonfiction, indispensable for success in their chosen field.

Students should have a minimum of eighteen upper-division hours in English and eighteen upper-division hours in Journalism. Three of the upper division journalism hours should be earned through media experience in Journalism 480 (Journalism Project).

## DEVELOPMENTAL STUDIES PROGRAM DOWNTOWN CAMPUS

The University's Developmental Studies Program is housed in the School of Arts and Sciences. In order to meet the needs of all of its students, developmental programs are provided on both the Main and Downtown Campuses.

The Downtown component is divided into three sub-components: Mathematics, Reading, and Writing. The program office is housed in the School of Arts and Sciences, Rm. B-3 of the Charlotte Street Building.

Given that the University is committed to enhancing the scope of instructional experiences to meet the varying educational needs of its total student population, the



Developmental Studies Program on the Downtown Campus has the opportunity to serve a unique population, in that, the majority of its students are mature adults with diverse backgrounds and experiences. Many students have been away from an academic setting for a considerable length of time, and are in need of special learning experiences. The Developmental Studies curriculum offers refresher courses in English, mathematics, reading and study skills. The primary goal of the Developmental Studies Program is to assist students in developing skills (reading, mathematics, writing, study skills) needed for success in their respective course work. Inherent in the program is the alternative of success rather than failure.

### TESTING AND COUNSELING SERVICES

Placement tests are given on the first night of class in developmental reading (*Nelson Denny Reading Test* and a *Reading Comprehension* test). Diagnostic tests (a writing sample and a standardized test) are given on the first night of class in Freshman English. On the basis of these tests, instructors advise students to take either Freshman English or a developmental English course. Counseling is provided for students enrolling in developmental math courses. Counseling has proven to be more effective than screening tests for selecting developmental math courses.

Any time during the academic year students may request screening tests in reading. During the testing period students are encouraged to schedule a conference time wherein the results are discussed and recommendations are made. Conferences are scheduled two days following the initial testing.

### PROGRAM PARTICIPATION

Participation in the Developmental Studies Programs on the Downtown Campus is totally voluntary. It is felt that self-selection and self-motivation are two important ingredients to success.

Courses offered in the Developmental Studies Program of the School of Arts and Sciences are placed under their respective departments, thus providing unification of all Developmental Studies areas. In addition, courses in the program are taught by faculty who teach regular and developmental courses.

Developmental Studies courses are offered for institutional credit: the grades received are computed in the grade point average; however, the developmental courses will not be counted toward a degree. Veterans and financial aid recipients with a need for basic skills courses will be eligible to receive benefits by enrolling in the various developmental courses.

### COURSE DESCRIPTORS

**EDRD 0100. Reading Competence. (3)** This course is designed as an experience in reception and processing of ideas for improvement of learning in the various disciplines. Efficiency in the use of study skills, reading in the content area, and flexibility in reading rate will be stressed. Formerly Eng. 0096 (Developing Reading Competence).

**NOTE:** Based on test scores and on recommendation of advisor or department head, this course may be a prerequisite to minoring in reading.

**EDRD 102. Flexibility of Rate and Speed of Comprehension. (3)** This course is designed to provide experiences to help the student increase his capacity to adjust his study skills and reading flexibility. Formerly Eng. 0097 (Reading Efficiency).

**ENG 0098. Basic English Skills. (3)** Elements of English grammar, syntax, and style; understanding sentences and paragraphs; spelling and vocabulary improvements; development of language skills required for English 0099 and in freshman composition.

**ENG 0099. Basic Composition. (3)** Reading and writing sentences, paragraphs, and short essay; studies in sentence structure and grammar. Designed for students who wish to take a refresher course in English before attempting English 0101.

**MATH 0100. Arithmetic and Pre-Algebra. (3)** Fundamental operations on whole numbers, fractions, integers, prime numbers, mixed numbers, decimals, percentages, ratios, and proportions.

**MATH 0101. Elementary Algebra. (4)** Integers, mathematical expressions, linear equations, exponents, products, factoring, algebraic fractions, radical expressions, quadratic equations, graphing linear equations and parabolas.

**MATH 0102. Geometry. (3)** Lines, triangles, circles, polygons, congruent and similar triangles, parallelism, area, coordinate geometry, geometric proofs. Prerequisites: one year of high school Algebra or Math 0101.



### DEPARTMENT OF GOVERNMENT AND PUBLIC AFFAIRS (Formerly Department of Political Science)

**Hoyt King, Ph.D., Head**

The Department of Government and Public Affairs is distinguished from other professional and academic departments and faculties of the University by a central focus on public affairs and public service more comprehensive than that of other academic departments. Yet the department's main concern is the academic preparation of undergraduate political science and public administration majors.

#### GENERAL POLITICAL SCIENCE

The curriculum in political science is designed to promote the broad purposes of the School of Arts and Sciences as well as to provide more intensive preparation for advanced study. The courses aim to help students acquire knowledge and attitudes which contribute to more intelligent and responsible political behaviors in a society and in a world undergoing rapid change.

A major consists of a minimum of 42 semester hours with a minimum of 35 hours on the 300 and 400 levels. Students may pursue one of two Baccalaureate degrees, the B.A. degree or the B.S. Students in the B.S. degree program may choose to qualify for teacher certification. A major in Political Science provides a student with the opportunity to acquire a broad education that will equip him to adapt to a wide variety of careers. The program is designed to encourage the student to analyze the Theories, institutions, and processes of political systems in the context provided by the social sciences: To provide preparation for careers in government, planning, public administration, etc., and to stimulate student interest in graduate and professional study.

#### PUBLIC ADMINISTRATION

The department also offers an undergraduate concentration in Public Administration. It is designed to prepare students for responsible intellectual and dynamic leadership in the modern world. It seeks to equip undergraduates with sufficient knowledge of the political world and skills in public administration so as to enable them to be productive members of society.

#### PRE-LAW

GPA provides one of the most frequently recommended curricula designed for students who wish to enter law school and ultimately the legal profession. Fifteen hours. GPA 221-American Government (3); GPA 430-Introduction to American Law (3); GPA 434-Legal Research and Writing; GPA 431-32-Constitutional Law Part I, Part II (6), should be taken during the four year period. The case method is used in instructing the pre-law courses.



URBAN AFFAIRS

In addition to the Bachelor of Science and Bachelor of Arts programs, the Department of Government and Public Affairs also offers an undergraduate interdisciplinary concentration in Urban Affairs.

In this era of rapid urbanization and technological sophistication there is a need for a complete and thorough understanding of urban dynamics which allows one to be able to view the city as a phenomenon. This requires an amalgamation and synthesis of subject matter between and among the various social and professional disciplines of the University.

The development of an Urban Affairs concentration is a response to this challenge. It is designed to broaden the horizon and thus enhance the marketability of students matriculating in the Department of Government and Public Affairs. Since public policy is essentially a response to the needs of society which is comprised of both urban and rural publics, it is incumbent upon the potential developers of those policies to be abreast of the social, political and economic intricacies of those environments as well as their interactions and interdependencies thereof. The Urban Affairs concentration is drawn from Government, Sociology, Psychology, Business Administration, and Geography and History.

The entire concentration consists of thirty-three credit hours administered with joint as well as multi-faceted collaboration.

Most of the courses will be taught by utilizing the resources of the Social Science Laboratory in which gaming and simulation innovations will be emphasized.

INTERNATIONAL RELATIONS

The concentration in International Relations rests on two basic premises: (1) the concept of professional study for careers in international affairs is a valid one. Changes in the scope of international Relations, their increasingly complex and multi-dimensional characters, and the growing interdependencies in the international system, all make the rigorous study of international relations more compelling and challenging than ever; and (2) recent and profound changes in the nature of the world structure have made it essential to reassess and redefine the knowledge and skills which policymakers will need to cope with international problems and challenges in the decade ahead and to restructure professional education to provide the requisite information. Both governmental and private decision-makers, in short, will require a much broader and deeper understanding than they have hitherto needed of the nature of the po-

litical, legal, economic, psychological and socio-cultural process in their own and other countries.

As a minimum majors are required to take at least six upper division hours in each of

the following subfields: American Government, International and Comparative Studies, Political Theory, Constitutional Law and Public Administration. Up to six hours in research methods and quantitative skills are also required.

URBAN AFFAIRS CONCENTRATION

A. Core Concentration	
GPA/UA	221—American National Government .....3
SOC/GPA/UA	451 or 310—Methods Course (jointly taught) .....3
GPA/UA	390—Introduction to Urban Affairs .....3
SOC/UA	460—Urban Sociology .....3
GPA/UA	440—Introduction to Public Administration.....3
SOC/UA	305—Uses of the Computer in the
	Social Sciences .....3
18 Semester Hrs.	
B. Students will be required to select one course from each of the following discipline groupings:	
<b>Psychology</b>	
PSY/UA 434 (3)Community Therapy: Social Training Program Development	
PSY/UA 341 (3) Social Psychology	
<b>Social Welfare</b>	
SW/UA 320 (3) Human Behavior and Social Environment	
SW/UA 460 (3) Social Work with Minorities and Women	
<b>Communications</b>	
SPCH/UA 210 (3) Fundamentals of Speech Communications	
SPCH/UA 375 (3) Communicative Skills	
SPCH/UA 448 (3) Principles of Public Relations	
<b>Geography/History</b>	
GEOG/UA 382 (3) Urban Geography	
GEOG/UA 310 (3) Cartography	
HIST 364 (3) History of Urban America	

BACHELOR OF ARTS CURRICULUM

FRESHMAN YEAR		Credit	Hours
		Fall	Spring
GPA 101, 221 .....	3	3	
ENG 101, 102 .....	3	3	
MATH 111 .....	4		
ART, MUS, DRAMA, PHIL .....	2	2-3	
MOD FOREIGN LANG			
(100 level) .....	4	4	
	17	13-14	
SOPHOMORE YEAR		Credit	Hours
		Fall	Spring
GPA 310, 315 .....	3	3	
GPA (300 or 400 level) 300,			
301, 360, 361, 390, 391,			
392, 420, 421, 423, 431,	6	6	
432, 440, 441, 442, 444.....	3-6	3-6	
Electives 300 or 400 .....		4	
MOD FOREIGN LANG .....	12-15	16-19	
JUNIOR YEAR		Credit	Hours
		Fall	Spring
GPA 222, 221 .....	3	3	
ENG 211, 212 .....	3	3	
SCI 121, 122 .....	3	3	
HIST 201, 202 .....	3	3	
MOD FOREIGN LANG			
(200 Level) .....	4	4	
P. E. 11-41 .....	1	1	
	17	17	
SENIOR YEAR		Credit	Hours
		Fall	Spring
GPA 300 or 400 Level			
(See Jr Year).....	6	6	
GPA 450 .....	3		
Electives (330 or 400 Level)	3	6-9	
MOD FOREIGN LANG .....	3	3	
	15	15-18	

BACHELOR OF SCIENCE CURRICULUM

FRESHMAN YEAR		Credit	Hours
		Fall	Spring
GPA 101, 221 .....	3	3	
ENG 101, 102 .....	3	3	
MATH 111 .....	4		
ART, MUS, DRAMA, PHIL .....	2	2	
P. E. (11-41) .....	1	1	
Elective(s) .....	3	6	
	16	15	
SOPHOMORE YEAR		Credit	Hours
		Fall	Spring
GPA 222, 320 .....	3	3	
ENG 211, 212 .....	3	3	
SCI 121, 122 .....	3	3	
HIST 201, 202.....	3	3	
Elective(s) .....	3	3	
P. E. (11-14).....	1	1	
	16	16-19	
JUNIOR YEAR		Credit	Hours
		Fall	Spring
GPA 310, 315.....	3	3	
GPA 300 or 400 level (300,			
301, 360, 362, 431, 420,			
421, 422, 440, 441, 442,	6	6	
443, 440, 390) .....	6-9	6-9	
Electives (300-400 level) .....	15-18	15-18	
SENIOR YEAR		Credit	Hours
		Fall	Spring
GPA 300 or 400 Level			
(See Jr Yr) .....	6	6	
GPA 450 .....	3		
Electives (300-400 Levels).....	6-9	9-12	
	15-18	15-18	



## BACHELOR OF SCIENCE DEGREE PROGRAM

### (With Teacher Certification)

FRESHMAN YEAR	Credit Hours	
	Fall	Spring
GPA 101, 221.....	3	3
ENG 101, 102.....	3	3
MATH 111.....	4	
PE (11-41).....	1	1
ART, MUS, PHIL.....	2-3	2-3
PSY 242.....		3
EDCI 201.....	3	
	16-17	12-13
SOPHOMORE YEAR	Credit Hours	
	Fall	Spring
GPA 222, 300.....	3	3
ENG 211, 212.....	3	3
SCI 121, 122.....	3	3
HEALTH 151, PHIL 202.....	2	2
HIST 201, 202.....	3	3
PE 11-41.....	1	1
	15	15
JUNIOR YEAR	Credit Hours	
	Fall	Spring
GPA 310, 420.....	3	3
GPA 300 or 400 level.....	6	6
EDCI 301, Psy 312.....	3	3
EDCI 387, EDSE 465.....	3	3
Electives.....	3	3
	18	18
SENIOR YEAR	Credit Hours	
	Fall	Spring
GPA 450.....	3	
GPA 451.....	3	
GPA (300 or 400 level).....	9	
EDRD 491.....		3
EDCI 472.....	3	9
HIST 371.....		3
	18	15

### COURSE DESCRIPTIONS

#### GPA 101. Introduction to Political Science.

(3) An introduction to the crucial ideas, questions, problems and methods involved in man's attempt to achieve order, justice and welfare in politics. The ideas, institutions processes and behavior associated with modern democratic political systems are emphasized. The meaning of such concepts as freedom, authority, equality and constitutionalism are explored in depth. Consideration is given to the elaboration or adaptation of values through the workings of political institutions and processes.

#### GPA 221. American National Government.

(3) An introductory course which deals with the foundation, organization and principles of national government. Attention focused on the relations of the citizens to the government and the rights, duties and obligations of citizens. GPA 221 is PREREQUISITE TO ALL UPPER DIVISION COURSES

#### GPA 222. State and Local Government.

(3) An analysis of the structure, principles, and operation of the state and local units of government and the nature of intergovernmental relations in the American Federal System. Illustrative material is drawn largely from Tennessee. (e)

#### GPA 300. History of Political Philosophy.

(3) Selected political philosophers from classical Greece to 1900, including Plato, Aristotle, Machiavelli, Locke and Rousseau.

#### GPA 301. Contemporary Political Philosophy.

(3) Recent works on the central issue in political philosophy, economic justice, rights, political authority. Prerequisite GPA 300.

**GPA 310. Research Methodology.** (3) An introduction to social science research methodology which involves data collection and processing procedures, computer usage, surveys, statistical analysis and research design. Prerequisite GPA 101, 221, 222.

#### GPA 311. Statistics for Social Sciences.

(3) A basic course designed to teach the major statistical concepts, procedures, techniques, and interpretations to beginning students in the behavioral sciences.

#### GPA 315. Public Opinion & Voting Behavior.

(3) An analysis of the process by which opinions are formed and of the purposes and techniques of propaganda and the functions and expression of public opinion.

#### GPA 320. Patterns of Tennessee Government.

(3) Study of Tennessee Government from the functional point of view emphasizing political activities, taxation, education, social welfare and economic services of the Government. Prerequisite GPA 222 (e)

#### GPA 360. Introduction to Comparative Government and Politics.

(3) This is a prerequisite for all comparative government in this department. It is therefore necessary to take this course before taking any other comparative course. Throughout the course, the central question of what constitutes a valid comparison will be considered. (e)

#### GPA 361. Comparative Government and Politics of Selected Areas.

(3) The course sets out to do two things—to construct a theoretical framework that makes possible a comparative method of analysis for political systems of all kinds. Secondly, to offer a comparative analysis of the political system of those areas of the world in which dramatic social and political changes are taking place in Asia, Africa, Latin America. Prerequisite GPA 360. (e)

#### GPA 363. International Organization.

(3) Designed to examine the nature of international organization and that of regional organizations. Materials include military economic, cultural and political regional integration experiences, with emphasis on the United Nations and its Agencies, European Economic Community, North Atlantic Treaty Organization (NATO); Organization of American States, (OAS); Organization of Africa; Unity (OAU); Economic Community of West African States (ECOWAS), etc.

**GPA 365. International Relations.** (3) An examination of the present-day relations and problems among states of the world and the major factors which underlie and influence these relations. Prerequisite: GPA 360. (e)

#### GPA 367. American Foreign Policy.

(3) A study of the forces and factors involved in American foreign policy and of the processes through which it is developed. (e)

#### GPA 368. Third World Politics.

(3) An introductory course on political-economic change in the Third World to provide an understanding of some of the major problems confronting Third World nations and to give insight into the various tools and strategies that Third World political leaders can use in dealing with those problems. Investigates some of the major avenues toward political development and will briefly assess the costs and benefits of the approaches discussed. (e)

#### GPA 371. Teaching Political Science Education in Secondary Schools.

(3) The theory,

methods and materials for teaching the disciplines in the social science area will be dealt with. Attention is given to the inter-relatedness of the various disciplines or discipline combinations as they are taught in secondary schools. Field Experience Required.

#### GPA 390. Introduction to Urban Affairs.

(3) This interdisciplinary course between Government and Public Affairs and Sociology will examine the interaction among government, the economy, both social and physical environments as it relates to urban life. An understanding of the complexity of urban life (i.e., social, political and economic needs) will be emphasized. (e)

#### GPA 391. Urban Politics.

(3) Surveys principal urban problems, their causes and public policies that deal with them. Designed to acquaint the students with the ideas of the major writers on such aspects of urban communities as the role and development of cities; their government administration and finance; urban planning and design; poverty and slums; ethnic, race and class relations; the administration of justice; urban mass transit; and the quality of urban life in the urban environment. (e)

#### GPA 392. Black Politics.

(3) An analysis of the past, present and future role of Blacks in the American Political System. The social, economic, and political position of Blacks are related to that of the larger population will be explored. Major work by and about Black Americans will be utilized. (e)

#### GPA 393. Political Economy.

(3) This course discusses the impact of economics on political systems. Various economic philosophies such as capitalism, communism, dependency are discussed as to how valid their theorized impact on the political stability of nations are.

#### GPA 400. Internship in Public Administration.

(3-9) Designed to intensify preservice (graduate) public administration students knowledge of the institutions involved in the governing processes. It should enable a student to learn in an actual setting while providing a service for the agency where he/she is interning. The needs and opportunities vary by agency so every program is different from others. Certain features are beneficial to any program and these are combined in the department's service learning internship program model. (e)

#### GPA 405. Special Topics.

(3) Student or faculty generated course. Scope of subject matter to be determined by students and instructor. Prerequisite: Permission of the instructor. (e)

#### GPA 420. Legislative Process.

(3) An examination of the structure and methods of transacting business in the American Congress and State Legislature and the role of legislatures in the American Political System. (e)

#### GPA 421. Judicial Process.

(3) An analysis of the court systems in the United States, both their role in the political system and the procedures by which they make decisions. (e)

#### GPA 422. Parties and Elections.

(3) Structure and functions of the party system—nominations campaigns and elections. The role of parties in the political process. (e)



**GPA 423. The Presidency. (3)** The course is concerned with the Office of the President of the United States in terms of both the institution and the men who have held that office. The origins, incumbents, responsibilities, and evaluations of the Presidency are considered in depth. Particular emphasis is placed on the study of the modern presidency as it has developed in the last half century. (e)

**GPA 424. Government, Public Opinion and the Press. (3)** Relations of executive, legislative, judicial and regulatory bodies and the press. Role of the press in expressing and influencing public opinion and governmental policy. (e)

**GPA 430. Introduction to American Law. (3)** The course is divided into three parts: Part I has three purposes: (1) to acquaint the student with English Common Law; (2) provide the student with an understanding of the close affinity which the development of American Law has to English Common Law; and (3) to trace the historical development of the American Law from the colonial period up to the twentieth Century. Part II has two purposes (1) to acquaint the student with basic legal concepts and doctrines; (2) to familiarize the student with both state and federal court systems. Part III has two purposes: (1) to provide the student with a general survey of the law in modern American Society as it determines the basic rights and liabilities of private persons and (2) to examine basic principles of law with which most of us are confronted in daily interaction with business and each other.

**GPA 431. Constitutional Law-Part I (3)**

**GPA 432. Constitutional Law-Part 2. (3)** These courses are devoted to a study of the sources, principles and powers of government in the United States as embodied in the Constitution and Judicial decisions in leading cases. They cover judicial decisions in leading cases. They cover judicial review, the power of the legislative executive and judiciary, the relation between the national government and states, freedom of speech, press and religion, due process and equal protection. (e)

**GPA 434. Legal Research and Writing. (3)** The purpose of this course is to acquaint the student with the major types of federal court reports, digests, citators, annotated reports, encyclopedias, treatises, restatements and law reviews. A fact situation will provide the basis for a legal research problem. (e)

**GPA 435. International Law. (3)** This course will cover the basic legal concepts and principles governing state behavior in the international order the nature and sources of international law, international agreements, sovereignty of states and recognition of statehood jurisdiction, immunities and state responsibility. (e)

**GPA 440. Introduction to Public Administration. (3)** Principles of public administration structure, and organization, financial management, administrative responsibility and the relation between the administration and other branches of government in the United States. (e)

**GPA 441. Public Personnel Administration. (3)** Concerned with the administrative procedure at all levels of government with due reference to structural and environmental factors.

The aim is to develop skills in analyzing administrative problems. (e)

**GPA 442. Selected Topics in Organization Theory. (3)** Critical survey of existing models/schools/approaches to the design of organization, planning, budgeting and control. Emphasis on recent developments in the theory and its relevancy to current problems in the public sector.

**GPA 443. Human Relations and Management. (3)** Deals with the different aspects of employee-employer relations, organizational communication, coordination and motivation of employees.

**GPA 444. Organizational Development, Innovation and Planned Change. (3)** Review of different strategies and approaches to organizational development, planning of change reducing the resistance to change. (e)

**GPA 445. Policy Sciences. (3)** This is an introduction to the tools and skills that can be used to analyze the policy-making process in the United States. It provides an analysis of the policy-making process of the national level in the United States focusing on the role of the three branches of government, political parties, citizens and the press.

**GPA 446. Intergovernmental Relations and Regionalism. (3)** Survey of the relations among government agencies throughout the sectors of government, i.e., local, state and national includes an examination of the impact of these relations on policy development and level and quality of citizen participation. Prerequisite GPA 222. (e)

**GPA 447. Research Seminar and Workshop in Public Management. (3)** Consists of field work and class discussions on selected issues, e.g., zero-based budgeting sunset legislation, community action, etc. Working as a group and on individual basis with the instructor. Student analyze empirical data and compile a final report.

**GPA 450. Senior Project. (3)** A directed research project upon a specific problem. The purpose of the project is to use conceptual knowledge and skills learned in research methodology and knowledge about particular area of political science.

**GPA 451. Independent Study. (3)** This class is designed to afford students the opportunity to engage in a course of study of greatest interest to him or her. The student has latitude in deciding the nature and type of project to be done. However, faculty approval and supervision is required. Prerequisite. SENIOR STATUS AND AT LEAST 24 HOURS OF UPPER DIVISION POLITICAL SCIENCE. (e)

## DEPARTMENT OF HISTORY AND GEOGRAPHY

**Bobby Lovett,  
Ph.D., Acting Head**

The Department of History and Geography offers courses of study at the undergraduate level leading to the Bachelor of Arts and the Bachelor of Science degrees. Students may earn either degree with a major in history; or they may follow the requirements for the interdisciplinary degree as described under the School of Arts and Sciences section of the catalog.

Instruction in history varies from lecture, audio-visual, to computer approaches, and is designed to present the main aspects of the rise and development of civilization. The curriculum emphasizes the social, economic, and political phases of history; but it also deals with the institutional, cultural, diplomatic and religious phases of man's civilization and cultures. One aim of the curriculum is to enable students to read historical literature critically and to acquaint students with the facts in the development of civilization.

The program in history and geography is designed to give the students knowledge of the important events, characters and development in the past of mankind. To achieve this aim, the curriculum requires that majors have a general understanding of certain related fields. Other purposes of the curriculum are to help prepare students for graduate study, the study of law, and for careers in government, archives, foreign service, teaching, libraries, map making, meteorology, industry, insurance, and in the administration of historical societies, sites, and museums.

The requirement for a history major is a minimum of thirty-three (33) semester hours, including a minimum of eighteen (18) semester hours in 300 and 400 level courses. The program of study includes the following major courses:

History 121-122	History 331
History 201-202	History 341-342
History 301-302	History 491-492, or 493
History 371	History 402
History 450	History 101

Students taking a B.A. degree in history should also complete a minimum of twelve (12) semester hours in a foreign language. Only "C" grades are acceptable for transfer students.



**HISTORY MINOR**

A minor in history consists of eighteen (18) semester hours of course work. The following courses are recommended: History 201-202, History 491-492, History 301, History 341 and History 342. However, it is suggested that each student tailor the history minor to his or her major. For example: business majors should take economic and industrial history; Government and Public Affairs majors should take diplomatic and constitutional history, among other history courses.

**GEOGRAPHY MINOR**

The program for a minor in geography consists of a minimum of eighteen (18) semester hours of credit in geography courses. Geography 171-172 or Geography 271-272 are prerequisites for upper level geography courses.

**CURRICULUM FOR A MAJOR  
IN HISTORY  
(Bachelor of Arts Degree)  
133 semester hours**

FRESHMAN YEAR	Credit Hours	
	Fall	Spring
ENG 101-102 .....	3	3
HIST 121-122 .....	3	3
SCI (Bio, Chm, Nat Sci) .....	3	3
MATH 111 .....	4	
PE or AERO .....	1	1
HIST 101 .....	1	
HUMANITIES .....		4
GEOG 171 .....		3
	15	17

SOPHOMORE YEAR	Credit Hours	
	Fall	Spring
ENG 211-212 .....	3	3
MODERN FOREIGN LANGUAGE .....	3	3
GEOG 172/SOC SCI .....	3	3
HIST 201-202 .....	3	3
PE or AERO .....	1	1
PSY 221, 242 .....	3	3
	16	16

JUNIOR YEAR	Credit Hours	
	Fall	Spring
ELECTIVES .....	3	3
HIST 331, 341 .....	3	3
HIST 301-302 .....	3	3
GEOG 271-272 .....	3	3
GEOG (300-400) .....	3	3
MODERN FOREIGN LANGUAGE .....	3	3
	18	18

SENIOR YEAR	Credit Hours	
	Fall	Spring
HIST 491-492 .....	3	3
HIST ELECTIVES (300-400) .....	3	3
MINOR (300-400) .....	3	3
HIST 450 .....	3	
ELECTIVES .....	3	3
HIST (400s) .....	3	3
	18	15

**BACHELOR OF SCIENCE DEGREE  
IN HISTORY  
(With Teacher Certification)  
(Bachelor of Science Degree)  
135 semester hours**

FRESHMAN YEAR	Credit Hours	
	Fall	Spring
ENG 101-102 .....	3	3
MATH 111 .....	4	
SCI 121-122 .....	3	3
ART 133 .....		2
HIST 121-122 .....	3	3
PE or AERO .....	1	1
GEOG 171 .....		3
HIST 101 .....	1	
	15	15

SOPHOMORE YEAR	Credit Hours	
	Fall	Spring
HIST 201-202 .....	3	3
ENG 211-212 .....	3	3
EDCI 201 .....	3	
PSY 242 .....		3
PHIL 323; MUS 131 .....	3	2
PE or AERO .....	1	1
GEOGRAPHY & ELECTIVES .....	3	3
HEALTH 151 .....	2	3
	18	18

JUNIOR YEAR	Credit Hours	
	Fall	Spring
HIST 331, 341, or 342 .....	3	3
HIST 301-302 .....	3	3
EDCI 301 .....	3	
PSY 312 .....		3
HIST 491 and ELECTIVE .....	3	3
GEOG (300-400) .....	3	3
EDSE 465 .....	3	
EDCI 387 .....		3
	18	18

SENIOR YEAR	Credit Hours	
	Fall	Spring
HIST 339 or 363 or 451 .....	3	
EDRD 491 .....	3	3
HIST 492, 371 .....	3	3
HIST 450 .....	3	
SOCIAL SCIENCE (300-400) .....	3	
GEOG (400) .....	3	
EDCI 472 .....		9
	18	15

**BACHELOR OF SCIENCE DEGREE  
IN HISTORY  
(Without Certification)  
(Bachelor of Science Degree)  
132 semester hours**

FRESHMAN YEAR	Credit Hours	
	Fall	Spring
HIST 121-122 .....	3	3
ENG 101-102 .....	3	3
SCI 121-122 .....	3	3
ART 133 .....		2
MATH 111 .....	4	
GEOG 171 .....		3
SPCH 210 .....		2
PE and AERO .....	1	1
HIST 101 .....	1	
	15	17

SOPHOMORE YEAR	Credit Hours	
	Fall	Spring
HIST 201-202 .....	3	3
ENG 211-212 .....	3	3
SOC 211, 320 .....	3	3
GEOG 391 & GEOG ELECTIVES .....	3	3
MUS 131 .....		2
GEOG 172 .....	3	
PE or AERO .....	1	1
PSY 201 or 243 .....		3
	16	18

JUNIOR YEAR	Credit Hours	
	Fall	Spring
HIST 301-302 .....	3	3
HIST 331 .....	3	
ELECTIVES .....		3
HIST 341 .....	3	
GEOG (300-400) .....	3	3
ELECTIVES (300-400) .....	6	3
HIST 391 .....		3
	18	15

SENIOR YEAR	Credit Hours	
	Fall	Spring
HIST 450 .....	3	
HIST 401 .....	3	
HIST 362, 422, or 451 .....	3	3
HIST 491-492 .....	3	3
ELECTIVES (300-400) .....	6	9
	18	15

**AFRO-AMERICAN STUDIES**

The Department of History and Geography offers enough courses for a minor (18-24 semester hours) in Afro-American history and culture. The courses that are available include Geography 372, 382, and 412 and History 385, 386, 491, 492, and 493.



## COURSE DESCRIPTIONS HISTORY (HIST)

**HIST. 101. Freshman Orientation. (1)** Covers the four broad areas of Freshman Orientation: Introduction to College; Academic Adjustment; Educational and Vocational Planning; and Personal Adjustment to College. The concluding part of the course encourages the undergraduate to examine the values he or she lives by and to recognize their importance to success in college and in life. Required of history and social science majors.

**HIST. 121-122. Growth of Civilization (1500-present). (3-3)** A survey of the contributions made by all the races of the world to civilization and mankind. From ancient times to the age of absolutism to the present.

**HIST. 121H-122H. Honors: Growth of Civilization (1500-present). (3-3)** The major social, economic, political, religious, and intellectual developments in European and world history from medieval times to 1815. Reserved for advanced students.

**HIST. 201-202. American History. (3-3)** This course is a study of the development of cultural, economic and political institutions in America from pre-Columbian times to the present. History 201 covers the period from pre-Columbian times to 1877. History 202 covers the period from 1877 to present. Required of all University graduates.

**HIST. 201H-202H. Honors American History. (3-3)** An intensive and extensive study of American History, pre-Columbian times to present. Reserved for gifted, high potential, high academic ranked students.

**HIST. 301-302. Foundations of Modern Europe. (3-3)** The first part traces the major political, social, economic, and intellectual development of Europe from 1500 to 1815. The second part, 302, is a study of Europe from 1815 to the present.

**HIST. 331. American Colonial History. (3)** The economic, social, religious, cultural, and political development of the American nation from 1492 to 1789.

**HIST. 333. The Early National Period. (3)** An in-depth study of the American republic from 1789-1824. Explores the growth of the American nation from the inauguration of the new federal government through the Era of Good Feelings.

**HIST. 335. Age of Jackson. (3)** A study of the impact of Andrew Jackson's life and public career upon the development of the state and nation from 1824 to 1845. Examines the issues of national growth, industrialization, urbanization, and changes in political institutions.

**HIST. 339. Business/Industrial History. (3)** An examination of American business and industrial history from 1877 to 1900. Focuses on the rise of the industrial machine, its political consequences, intellectual response and development, and emerging social patterns.

**HIST. 341. History of Tennessee. (3)** An investigation of the cultural, economic and political developments in Tennessee from territorial status to the present. Required of history and certain education majors.

**HIST. 342. History of the Modern South. (3)** This course focuses on the political, social, and cultural developments in the New South from 1900 to the present. The emphasis is upon Populism, Progressivism, Race Relations, Urbanization, modernization and industrialization in the South.

**HIST. 361. Introduction to the Philosophy of History. (3)** A study of the philosophy of history and historical literature of major European and American thinkers from the time of the Greeks to the present. Includes Thucydides, Herodotus, Tacitus, St. Augustine, Vico, Voltaire, Hegel, von Ranke, Marx, Turner, Beard, Toynbee, and others.

**HIST. 362. Constitutional History of the United States. (3)** Attention is focused on the factors which have influenced constitutional changes and historic cases in which the provisions and principles of the Constitution of the nation have been interpreted and applied. A study of the evolution of constitutional law.

**HIST. 363. History of Science and Technology. (3)** This course acquaints the student with selected topics and sources in the historical development of modern science and technology from the Renaissance to the present. It includes the philosophies of science, mathematics, physical sciences, earth sciences, biological science, medicine, technology, and pseudo science.

**HIST. 364. History of Urban America—From Early Times to Present. (3)** Interdisciplinary in character, the course will give signal attention to the political, economic, sociological, demographic, and geographical influences effectuating the transformation of the nation from agrarianism to urbanization.

**HIST. 371. The Teaching of Social Sciences. (3)** The theory and materials for the teaching of history, geography, sociology, political science, and other social sciences. A methods course required of social science and history majors who plan to teach on the secondary school level and who opt for the B.S. with certification.

**HIST. 372. Economic History of the U.S. 1500-1865. (3)** Economic development of the American nation from Colonial times to the Civil War Era. Includes developments in agricultural history, commerce, early industry, and the transportation revolution.

**HIST. 373. Economic History of the U.S. 1865-Present. (3)** The economic development of the American nation since the Civil War. The rise and regulation of Big Business, Progressivism and big business, the New Deal, and the Age of Giant Corporations. Basic economic theory covered.

**HIST. 374. The Family in American History. (3)** A study of domestic life, childhood and youth, women's roles, and sexual ideologies in America. Emphasis will be placed on the diverse types of family patterns and changes in attitudes throughout history. The course is interdisciplinary in approach.

**HIST. 375. Women and Children in European History. (3)** An introductory survey of the position and roles of women and children from ancient times to the present. Explores attitudes toward women and women's status in European societies. Equal emphasis will be placed on perceptions about children and child-rearing practices.

**HIST. 381. Civil War and Reconstruction 1850-1877. (3)** A study of the sectional disputes in the 1850s, the course of the Civil War, the constitutional problems of Reconstruction times, the condition of the freedom after the war, and political history up to 1877.

**HIST. 384. Ancient History. (3)** An examination of ancient civilizations and the study of Roman and Hellenistic cultures. Materials in this course will include archaeological evidence, philosophical writings, and the study of political institutions.

**HIST. 385. North Africa. (3)** A history of North Africa and the Middle East to 1800.

**HIST. 386. North Africa. (3)** A history of the Middle East since 1800.

**HIST. 387. Medieval History. (3)** A Topical approach to the European Middle Ages. Focuses upon early Christianity, feudalism, manorialism, the development of monarchy, the rise of the towns, Church-State conflicts, and the twelfth century renaissance.

**HIST. 388. Renaissance and Reformation Europe. (3)** An intensive study of the period 1300 to 1600 in Europe. Focus will be placed on economic, political, intellectual, and religious developments of the period. Particular attention will be given to artistic works, humanist thought, and the ideas of the major religious reformers.

**HIST. 391-392. Russian and East European History. (3-3)** Origins and expansion of East European countries since 1815. This course discusses and analyzes the realities of political, social and cultural developments in Poland, Czechoslovakia, Bulgaria, Rumania and Russia, with emphasis on Russia before and after the revolution of 1917. History 392 concentrates on the period from 1924 to the present.

**HIST. 393. French Revolution and Napoleon. (3)** An intensive examination of French society, government, and thought during the eighteenth and early nineteenth centuries. Particular attention will be given to the cause for the Revolution, to the stages of revolutionary activity, and to the nature of Napoleon's reign.

**HIST. 401. The World in the Twentieth Century. (3)** Major world events and issues since 1900, including the rise and decline of colonial empires with emerging nationalism, impact of democracy, facism and communism, 19th and 20th century thought, effects of science and arts on our great age, attempts at international governments, organization, and cooperation, and the revolution of rising expectations.

**HIST. 402. Twentieth Century World Leaders. (3)** Biographical history of key twentieth century western and non-western men and women in historical perspective. Examines the leader's characteristics, philosophy, leadership capabilities, and contributions to arts, business, education, literature, politics, religion, and science.



**HIST. 411-412. European Social and Cultural History. (3-3)** History 411 is an analysis of the realities, cultural attitudes, and intellectual history of Europe. Focuses on such topics as humanism, religious reform, enlightenment, industrialism, romanticism, and totalitarianism. History 412 begins at the Renaissance, where 411 ends, and continues to the present.

**HIST. 421-422. Diplomatic History of the U.S. (3-3)** An analysis of American foreign affairs, 1776 to the present. History 421 begins with the diplomacy surrounding the emergence of the United States as a nation, and concludes with the nation's growth into a world power by 1900. History 422 treats the further expansion of the United States' role as a dominant world power by covering the years 1900 to the present, and investigating the topical areas such as dollar diplomacy, foreign policies preceding and during the world wars, containment and anti-communist policies, the Vietnam dilemma, and Nixon détente.

**HIST. 425-26. Social and Cultural History of the U.S. (3-3)** Analysis of social, cultural, and intellectual thought. Focuses on such topics as Puritanism, the Enlightenment, romanticism, individualism, Social Darwinism, urbanism, and popular culture. History 425 covers the period from 1600 to 1865; History 426 covers the period from 1865 to the present.

**HIST. 427-428. History of the South. (3-3)** History 427 focuses upon the years 1607-1865. It covers the periods of colonialism, Revolutionary War, slavery and the cotton kingdom, and Civil War and Confederacy. History 428 surveys the period from 1865 to the present. Industrialization and racial desegregation—so important to a redefinition of the South—will receive attention.

**HIST. 431. America Since 1945. (3)** An intensive investigation of the American nation since World War II. Includes domestic politics, America's involvement in post-war world affairs, and economical, cultural, and social developments.

**HIST. 432. Vital Topics in History. (3)** Selected topics and issues that are not covered specially in other courses. An indepth analysis of a narrow subject. Reserved for students of high scholastic standing.

**HIST. 441-42. Special Readings in History. (3-3)** Designed for the individual student who requests supplementary study in areas not ordinarily covered intensively or otherwise in regular course offerings. Topics are arranged with the instructor in charge.

**HIST. 450. Introduction to Historical Research. (3)** Primarily for seniors majoring in history. Provides instruction in historical research methods and criticism of historical sources. Students select special topics for independent investigation, writing, and oral defense.

**HIST. 451-452. Latin American History. (3-3)** An examination of the general history of the civilization of Latin America from Indian times through the Portuguese-Spanish Colonization period. History 452 covers the period from 1800 to the present, including revolution, independence, nationhood, and world interdependence.

**HIST. 481-482. History of Asia. (3-3)** An investigation of civilizations of China, Japan, Indian sub-continent, and the general Far East. History 481 covers the period from the development of the classical period to western domination. History 482 covers the period from the age of imperialism to the present.

**HIST. 491-492. Afro-American History. (3-3)** A study of the integral role and contributions of black-Americans in the history and development of the United States. History 491 covers the period from the history of early African kingdoms to the end of southern American slavery, 1865. History 492 covers the period from 1865 to the present. Both sections include the study of black history by using computers and other modern techniques of research and instruction.

**HIST. 493. Afro-American History: Special Topics. (3)** Designed to cover intensively the topics of special interest in contemporary times. Topics are selected by the instructor upon scheduling the course or seminar.

**HIST. 495. History of the American Indian Before 1860. (3)** A study of the history and culture of Indian peoples on the American continent before the arrival of Columbus and up to removal from the eastern United States. Focuses upon Indian nations in the Ohio Valley, the eastern coastal plains, and the Southeast.

**HIST. 496. History of the American Indian, 1860 to the Present. (3)** A survey of the American Indian after removal from the eastern United States and until present times. Focus upon the Plains' Indians, Indian warfare in the West from 1865-1890, and the attempts of integration and assimilation of Indians into modern American society.

## GEOGRAPHY (GEOG)

**GEOG. 171-172. World Regional Geography. (3-3)** Study of geographic regions of the world. Regional surveys include a special consideration of the physical character of the land, resources, economics, and cultures. It is designed to provide general education in geography for Education and Social Science majors.

**GEOG. 173-174. Elements of Physical Geography. (3-3)** Study of weather and climate, flora and fauna, soils, landforms, mineral resources of value to man, major surface waters, ground water regions, and different types of coastlines. Included are the cause and distribution of these elements and their impact on man, and a general geographic analysis of a selected area to emphasize these elements and their impact on society. Suitable for Business Administration and Science majors.

**GEOG. 271-272. Economic Geography (3-3)** Emphasis on world distribution of economic and business activities, stressing factors of location and economic concepts of locational change.

**GEOG. 310. Cartography. (3)** An introductory course in the nature and use of maps, the construction of map projections and their uses, and the preparation and use of maps for various types of analysis. Includes lecture and laboratory work.

**GEOG. 333. Geography Field Trip. (3)** A spring and summer excursion to selected areas. Library studies and a report required. Prerequisite: 3 semester courses (9 hrs.) in geography and consent of the instructor.

**GEOG. 351. Meteorology (Elements of Weather). (3)** Properties and conditions of the atmosphere; instruments used in weather observation; emphasis upon applications.

**GEOG. 361. Principles of Geomorphology. (4)** See Geology 480.

**GEOG. 371. Geography of the United States and Canada. (3)** Recognition analysis and interpretation of the basic physiographic features, resources, and human adjustments within its several regions.

**GEOG. 373. Geography of South America. (3)** Regions and resources of South America beyond the Caribbean with special study of the distinctive role of each country according to its geographic significance. Problems of future development will be emphasized.

**GEOG. 381. Geography of Europe. (3)** A regional analysis of Europe west of the Soviet Union, which is designed to study the cultural, physical, and economic character and problems of European nations.

**GEOG. 382. Urban Geography. (3)** Study of cities as geographic units, including functions and structures with particular references to urban growth patterns, socio-economic functions and problems, rural-urban relationships, and contemporary trends.

**GEOG. 391. Political Geography. (3)** Analyzes the structure and function of political regions with emphasis on the sovereign state. Focus on sources of national strength, internal conflict, geopolitics as it relates to power, strategy, and international relationships among sovereign countries. Illustrated by recent developments and current situations.

**GEOG. 402. Geography of the South. (3)** A regional study of Southeastern United States with emphasis on physical and human resources, settlement and population, agriculture, extractive industries, transportation, and present urban settlements. Contemporary problems and progress stressed.

**GEOG. 403. Geography of Tennessee. (3)** A detailed study of Tennessee and its subdivision into natural and economics regions. Ideal for Elementary Education and Engineering majors.

**GEOG. 410. Geography of Asia. (3)** Regional analysis of cultural and physical geography of Asia including land utilization, settlement, raw material, population characteristics and distribution as each relates to economic and political problems. Emphasis on Middle East, India, Pakistan, and Indo-China.

**GEOG. 412. Geography of Africa. (3)** A study of the regions and resources of the African continent with special consideration given to Africa south of the Sahara desert, including its development and potential.



**GEOG 415. Geography of Australia and Oceania. (3)** A geographical analysis of the physical environment and cultural occupancy of the Australian continent, New Zealand, and the Pacific islands.

**GEOG 420. Geography of the Soviet Union. (3)** A geographical analysis of the topography, resources, and economic development of the Union of Soviet Socialist Republics (Russia).

**GEOG. 421. Geography of China. (3)** Regions and resources of the Republic of China, with special emphasis on the differences and the similarities of each cultural and physical region. The final objective of the course is to place China as a whole unit into the proper continental and world framework.

**GEOG. 425. Historical Geography of the United States and Canada. (3)** The changing physical and cultural geography of Anglo-America during four centuries of settlement and development.

**GEOG. 430. Social Geography. (3)** A study of the geographical perspectives of crime, ghettoization, environmental deterioration, poverty, interurban mobility, class, population growth, riots and violence. Ideal for Sociology and Social Welfare majors.

**GEOG. 462. Climatology. (3)** Regional analysis of the world's weather and climate with emphasis on climatological processes and their geographical implications.

**GEOG. 492. Theory and Methodology. (3)** The objectives of this course are to give students a historical as well as contemporary background concerning men and their writings in geography; to integrate all phases of geography into seminar-type discussion; to introduce students to pertinent concepts and theories; to tie all periods of time to spatial phenomena; to indicate geographical evolution. Specially for minors.

**GEOG. 499. Special Problems in Geography. (3)** In-depth study of selected areas of geography, through selected readings, independent topics, and oral and written presentations. By consent of the instructor.

## THE HONORS PROGRAM

### McDonald Williams, Ph.D., Director

In the fall, 1964-1965, the Honors Program was begun for the four-year baccalaureate student; and in the fall, 1978-1979, a comparable program was established for the two-year associate degree student in the School of Nursing. The Honors Program is administered by a Director, who is assisted by an Advisory Committee. This committee is composed of two faculty members who teach Honors courses, two who teach colloquia, two who are selected at large, and one who represents the School of Nursing. The members serve on a rotating basis.

The basic premise of the Honors Program is that the academically superior student needs the challenge and the opportunity to achieve academic excellence. The Honors Program proposes to provide this challenge and this opportunity. Honors courses, which are restricted to students in the Honors Program and to those with a "B" average in their major who may be recommended by their department heads, are designed to require a higher level of achievement than those in the regular curriculum. These classes are small in size, thereby allowing for close teacher-student relationships. Other courses from the regular curriculum which may be taken for Honors credit require additional assignments of those Honors students who are enrolled.

The basic premise resulted in the formulation of the following goals of the Honors Program:

1. To offer a program or programs designed to stimulate the gifted student and enable him or her to do a quality of work in keeping with his or her potential,
2. To identify the academically superior student in the University,
3. To publicize and emphasize the Honors Program,
4. To give proper guidance to the student in the Honors Program,
5. To advocate and to assist in the creation of an academic climate that will stimulate all students at the University to perform to their intellectual capacity,
6. To attract to the University those students whose educational records show evidence of superior intellectual ability,
7. To encourage the students in the Honors Program to participate in all of the various activities at the University.

Students are admitted to the University Honors Program in several ways. The Honors Office, particularly during the spring and the summer following the student's graduation from high school, obtains through the Office of Admissions and Records the student's performance on the American College Test (ACT) and his high school grade-point average. Dependent upon the student's composite score, and/or his or her high school academic record, and, for nursing students, the recommendation of the Admissions Committee for the School of Nursing, the Honors Office writes the student to invite him or her to participate in the Honors Program. Included with this letter is an application blank the student is asked to execute if he or she desires to become a member of the Program. The student is also required to secure recommendations from two high school personnel: principal, counselor, teachers.

Admission to the Honors Program is made on the basis of the student's ACT score, and/or the high school record, and the recommendations as mentioned above. All students who are invited to participate in the Honors Program must, however, make separate application for admission to the University.

Baccalaureate students who are not invited to participate in the Honors Program as entering freshmen may be admitted later by recommendation of a university faculty member. Following receipt of such recommendations, the Honors Office invites all students so nominated to appear for an interview. Each student is ordinarily interviewed by two faculty members, whose evaluations, together with his or her grade-point average, will determine his or her acceptance. The latest point for a four-year student to enter the Honors Program is the first semester of the sophomore year.

Students who have not been invited to join the Honors Program but who are interested and feel that they can meet the entrance requirements should write to:

Dr. McDonald Williams, Director  
Honors Program  
Tennessee State University  
Nashville, TN 37203

When a student enters the Honors Program, he or she is advised by one's major department and by the Honors Office. During his or her either two or four years at the University, the Honors student will take courses both from the regular curriculum and from the offerings of the Honors Program. Ordinarily, the freshman and sophomore four-year students will take two Honors courses each semester, with Honors Freshman Composition and Honors World or American Literature being required. Further requirements are the colloquia—Junior and Senior. It is expected that the Junior and Senior Colloquia will fit into the student's schedule as "electives." A final requirement is the Honors senior thesis, which is to be defended before a committee, or a recital or the like for those students in the performing arts.

The two-year nursing students will take during their freshman year Honors Freshman Composition; and during their sophomore year they will take either the Junior or the Senior Colloquium and either Nursing 201H or Nursing 202H and Nursing 220H. In Nursing 220H Honors students will write a paper dealing with some such subject as the ethical implications of nursing. This paper will be presented orally before a committee.

Four-year nursing students will meet the minimum requirement of twenty-four



hours in Honors work, to include Eng. 101H, 102H, 211H, 212H, and HP 300H and 400H. Nursing 422-423 will be accepted in lieu of HP 410H, with an oral examination to be scheduled for the project written in the latter course.

The Honors Program does not require additional courses beyond those required of other students. Four-year students admitted to the Program later than the first semester of their freshman year will be exempted from whatever requirements are expected prior to their entrance.

With the exception of the Honors Colloquia, grades awarded in Honors courses coincide with those given for courses in the regular curriculum. In the Colloquia, however, the grades are:

- H Honor  
4 quality points per semester hour
- P Passing  
3 quality points per semester hour

To remain in good standing in the Program, a student must maintain a minimum cumulative grade-point average of 3.0, based on all course work. A student may withdraw from the Program at any time, but he should first notify the Honors Office.

Also important in the retention of a student is the semestral evaluation of him by his Honors teachers, who determine whether he is of Honors calibre and whether he is working up to his potential.

In an effort to encourage Honors students to achieve academic excellence throughout their undergraduate years, the Honors Program annually sponsors an Honors Academic Awards Day. The awards—the recipients of which are determined by the Honors Advisory Committee—and their criteria are: the McDonald Williams Senior Award, the Prem S. Kahlon Junior Award, the Joseph A. Payne Memorial Sophomore Award, and the Harold R. Mitchell Freshman Award, each of which is based upon academic performance, personal qualities, and service both to the Honors Program and the University; the Washington Industries Awards, to all seniors and the outstanding junior, based upon requirements for the Program and cumulative average; the Junior-Senior Honors key, based upon cumulative average, hours in Honors courses, classification; and the Outstanding Freshman, Sophomore, Junior, and Senior Class Awards, based upon faculty recommendations, cumulative average, campus and other activities, campus awards and recognition, membership in honor groups, grades in Honors courses, and contributions to the Honors Program. On Honors Awards Day, all students who are in good standing receive Certificates of Achievement,

signed by the Director of the Program, the Vice-President for Academic Affairs, and the President of Tennessee State University.

Two-year and four-year students who complete the requirements of the Honors Program will, at commencement, be graduated with "Associate Honors" and "University Honors," respectively.

These requirements include, for the two-year student:

- 1. Taking a minimum of 18 hours of Honors work
- 2. Writing and defending a paper growing out of Nursing 220H
- 3. Attaining a cumulative average of at least 3.25

For the four-year student:

- 1. Taking a minimum of 24 hours of Honors work, or 18 hours if the student enters during the sophomore year.
- 2. Giving a recital or writing and defending a senior thesis. The student will select a topic for the Honors Thesis with the approval of his or her major adviser and the instructor of the course. The topic may be related to his major field of interest or to a colloquium. Insofar as possible, advisers for the Honors thesis will be members of the Honors faculty. The student will select the topic in the fall semester for his or her senior year, complete the thesis by the beginning of the spring semester, and defend it before the Honors Advisory Committee and such other persons who may be invited to sit with the Committee.
- 3. Attaining a cumulative average of at least 3.25.

Students being graduated with "Associate Honors" or "University Honors" are distinguished in the academic procession by a scarlet and gold card.

The Honors Office offers its assistance to Honors students as they make application for fellowships and for admittance to graduate or professional school.

HONORS COURSES  
Two-year Students

FRESHMAN YEAR		SEMESTER	
Name of Course		Credit Hours	
		I	II
English 101-102H .....		3	3

SOPHOMORE YEAR		SEMESTER	
Name of Course		Credit Hours	
		I	II
Senior Colloquium 400H .....		3	
or			
Junior Colloquium 300H .....			3
Nursing 201H .....	9		
or			
Nursing 202H .....			9
Nursing 220H .....			1

Four-year Students

FRESHMAN YEAR		SEMESTER	
Name of Course		Credit Hours	
		I	II
Orientation 100H .....		1	
English 101-102H .....		3	3
Biology 111-112H .....		4	4
Mathematics 111-112H .....		3	3
Theatre 120H .....		2	
Bio-Physical Sciences			
121-122H .....		3	3
Chemistry 121-122H .....		4	4
History 121-122H .....		3	3
Art 133H .....			2
History 201-202H .....		3	3
Govt. Pub. Affairs 221H .....			3

SOPHOMORE YEAR		SEMESTER	
Name of Course		Credit Hours	
		I	II
Education 201H .....		3	
English 211-212H .....		3	3
Sociology 211H .....		3	
Speech 220H .....		3	
Psychology 242H .....			3
English 310H .....		2	

JUNIOR YEAR		SEMESTER	
Name of Course		Credit Hours	
		I	II
Junior Colloquium 300H .....			3
Sociology 300H .....		3	
English 361-362H .....		3	3
Education 387H .....		3	

SENIOR YEAR		SEMESTER	
Name of Course		Credit Hours	
		I	II
Honors Senior Colloquium			
400H .....	3		
Honors Senior Thesis 410H .....	3		
Honors Sociology 451H .....			3
Honors Clothing and Textiles			
462H .....			3
Honors Foods and Nutrition			
462H .....	3		
Honors Child Development			
and Family Relationships			
467H .....	3		
Honors Home Economics			
Education 474H .....			3
Honors Social Welfare 480H .....			3
Honors Sociology 490H .....	3		

COURSE DESCRIPTIONS

**Hp 100H. Honors Orientation.** (1) A course designed to assist the freshman student in his adjustment to college life in the areas of learning, educational and vocational planning, and interpersonal relations. Offered in fall semester. One meeting per week.

**Eng 101-102H. Honors Freshman English.** (6) An Honors course in Freshman English designed for students with special competence in English to work at an advanced level. Class



enrollment is limited and restricted to students notified as having qualified for the English Honors section.

**Bio 111-112H. Honors Animal Biology. (8)** A course designed for students of exceptional caliber. Emphasis placed on individual critical and original thinking based on recent research findings dealing with animal biologic principles. As such the student will be expected to do extensive reading of literature, make special reports, and participate in guided discussions. Laboratory problems are so designed as to challenge the ingenuity and creativity of the student. Lecture: 2 credits; Laboratory: 2 credits per semester.

**Math 111-112H. Introduction to College Mathematics I and II. (6)** A review of fundamental operations of algebra and arithmetic: linear and quadratic equations, trigonometry, probability and statistics. This sequence will consider the more theoretical aspects of each of the above topics. The course is intended for students enrolled in the University Honors Program. Prerequisite for Math 112H is 111H.

**Thea 120H. Appreciation of Drama. (2)** Introduction to dramatic principles through the study of major periods and representative plays from the Greek period to the present.

**Sci 121-122H. Honors Introduction to Bio-Physical Sciences. (6)** An interdisciplinary course involving the principles of mathematics, chemistry, physics and biology. The objective of the course is to integrate the applicable areas as they are related to living organisms. Lecture: 2 credits; Laboratory: 1 credit per semester.

**Chem 121-122H. Honors Chemistry. (8)** Lectures deal with the basic theories of chemistry, atomic structure, kinetic theory, chemical stoichiometry, the chemical bond, oxidation-reduction, solutions, and chemical equilibrium. Examples may be taken from all fields of chemistry and its applications. Laboratory during the second semester is devoted to analysis, including quantitative anion and cation analysis, with an introduction to quantitative analysis. A good mathematical background is required.

**Hist 121-122H. Honors Growth of Civilization (1500-present). (6)** The major social, economic, political, religious, and intellectual developments in European history from medieval times to the Age of Metternich. History 122 is the continuation of 121.

**Art 133H. Honors Art Appreciation. (2)** A comprehensive survey of the art of prehistory: Egypt, Greece, Rome, and the Romanesque and Gothic periods; the art of the Renaissance, Baroque, and Rococo periods. Emphasis is on comparing these periods historically as well as stylistically.

**Educ 201H. Honors Foundations of Education. (3)** This course is designed to challenge the abilities of exceptional students toward a clear understanding of the historical, philosophical, and sociological aspects of education and how these areas of education have relevancy to the work of contemporary schools. The method will include presentation of basic theoretical and methodological principles essential to the investigation and solution of problems of education. Emphasis will be placed on aiding and encouraging creative thinking.

**Hist 201-202H. Honors American History. (6)** An intensive and extensive study of American history from pre-European period to the present. Great emphasis is placed upon oral and written exercises. These courses are open to students with recognized high potential and academic rating. This course is in lieu of History 201, 202 for those qualified.

**Eng 211-212H. Honors World Literature. (6)** An analytical reading of selected poetry, prose, and drama from the nations of the world. The subject matter for both semesters is arranged chronologically, with that of the first ranging from the Ancient Chinese through the Renaissance; and that of the second, from the Age of Classicism and Reason to the 20th Century.

**Soc 211H. Honors Introduction to Sociology. (3)** This course presents to students a comprehensive study of social thought, concepts, and social change. Students are expected to analyze and interpret man in society and man in culture. The course is designed to give the student a basic understanding of himself in relationships to others.

**Nursing 201H. Family-Centered Approach with Long-Term Illness. (9)** Through application of the nursing process, the student learns to assist the individual with long-term illness, and his family, to cope with commonly occurring changes in health status which require a variety of skills, psychological support, prevention and rehabilitation, and health teaching. Includes Psychiatric Nursing. Pre- or co-requisite Sociology 211.

**Nursing 202H. Family-Centered Approach to Acute and Short-Term Illness. (9)** Utilizing the nursing process, the students learn to assume increasing responsibility for self-directive judgments in patient situations which require depth of understanding of concepts and principles related to man and his adaptation to the environment during crisis. Includes Obstetrical Nursing. Pre- or co-requisite, Microbiology 250.

**Nursing 220H. Nursing Seminar. (1)** Current issues and trends in the practice of nursing and the relationships with past events. This course includes legal aspects, nursing ethics, and those aspects of professional adjustments related to making the transition from student to graduate practitioner. Co-requisite with Nursing 202.

**Spch 220H. Honors Public Speaking. (3)** A study of the principles of speech composition and delivery with emphasis upon the presenting of the various forms of oral communication.

**GPA 221H. Honors American National Government. (3)** This is an introductory course which deals with the foundation, organization, principles, and behavior of the national government. Attention is also focused on the relations of citizens to the government, and on the rights, obligations, and political behavior of Americans. Topics covered include institutional descriptions; public opinion; political participation; recruitment; interest groups; parties; legislative, judicial, and executive behavior; public policy; and democratic theory. There are no prerequisites.

**Psy 424H. Honors Human Growth and Learning. (3)** A critical examination of the physiological, psychological, emotional, sociological development of the human organism from conception through senescence, and a study of the relationship between growth and learning. The learning process will emphasize the modified case study approach in the analysis of the stages of growth and development, individual and group interest projects, seminars, and examination of contemporary research and related experiences.

**HP 300H. Honors Junior Colloquium. (3)** Lectures, discussions, and student writing based upon a central theme—such as "The Twentieth Century"—which may vary from year to year. Original work and interpretations and adaptations of original works are bases for discussions. The faculty member who conducts the colloquium may invite outside experts to participate when he or she deems it advisable.

**Soc 300H. Honors Social Statistics. (3)** A course designed to introduce sociology and social welfare majors to simple statistical methods using social data. Emphasis is placed on learning to interpret and construct tables, charts, and graphs; using social survey data, census materials, and other governmental reports involving social data.

**Eng 310H. Honors Technical Report Writing. (2)** A study of the fundamentals of written reports required in modern engineering (310E), with emphasis on grammar, sentence structure, and style, as well as on specialized techniques.

**Eng 361H. Honors American Literature of the Nineteenth Century. (3)** A study of major American writers and literary movements, including such writers as Emerson, Thoreau, Hawthorne, Twain and Crane, and such movements as romanticism, transcendentalism, realism, and naturalism.

**Eng 362H. Honors American Literature of the Twentieth Century. (3)** A study of literary trends in the present century, with emphasis on such major figures as Dreiser, Frost, Eliot, Faulkner, Fitzgerald, Ellison, Lowell, Baldwin, and Bellow.

**EDCI 387H. Honors Curriculum Development. (3)** The course is designed (1) to give students an opportunity to study critically the major stages of development of the school curriculum in public education in the United States, (2) to study in depth those forces and factors in our culture which have brought about major changes in the structure, content, and methodology in public education, (3) to participate in elementary research through interpretation of available data bearing on curriculum revision, and (4) to give practice in identifying and discussing current issues, problems, practices, innovations, and trends in the total area of the development of curriculum theory.

**HP 400H. Honors Senior Colloquium. (3)** Lectures, discussions, and student writing based upon a central theme—such as "The Educated Person"—which may vary from year to year. Original work and interpretations and adaptations of original works are based for discussions. The faculty member who conducts the colloquium may invite outside experts to participate when he or she deems it advisable.



**HP 410H. Honors Senior Thesis.** (3) The student will be allowed freedom of choice in selecting a topic for his Honors thesis. The topic may, for example, be related to his major field of interest or to a colloquium. Insofar as possible, advisors for the Honors thesis will be members of the Honors faculty. The student will select his topic in the fall semester of his senior year, complete his thesis by the beginning of the spring semester, and defend it before the Honors Advisory Committee and such other persons who may be invited to sit with the Committee.

**Soc 451H. Honors Introduction to Social Research.** (3) A study of the theory and methods of social research, including the structure and use of the questionnaire, the schedule, the interview, case histories, sociograms sampling, etc.

**CLT 462H. Honors Clothing and Textiles.** (3) An intensive study of the sociopsychological, technological, and anthropological aspects of clothing and textiles.

**NTR 462H. Honors Foods and Nutrition.** (3) Directed study and investigation involving techniques used in nutrition research.

**CDFR 467H. Honors Child Development and Family Relationships.** (3) An intensive investigation of a special area in Child Development or Family Relationships. Open to advanced juniors and seniors showing special ability in CDFR and to students enrolled in the University Honors Program.

**HEED 474H. Honors Home Economics Education.** (3) Directed study and investigation based on theoretical principles, philosophy, and research in Home Economics Education.

**SW 480H. Honors Social Welfare.** (3) An opportunity for students through seminar and field trip experiences to examine more analytically current social problems such as health, income maintenance, social relationships, etc., that are related to the social work profession and the social welfare system. Students will independently study a specific problem and are required to submit a senior essay. Limited to students with a 3.0 average. Prerequisites 330, 331, and 340.

**Soc 490H. Honors History of Sociological Theory.** (3) Major sociological theories as represented by Comte, Spencer, Durkheim, Weber, Simmel, *et al.*, including those of the contemporary period.

## DEPARTMENT OF MODERN FOREIGN LANGUAGES

Joan C. Elliott, Ph.D.,  
Head

The offerings of the Department of Modern Foreign Languages are designed to meet the needs of those who are (1) preparing for careers as secondary teachers of foreign languages, (2) desir-

ing positions in business, industry or government, (3) planning to attend graduate school, or (4) satisfying degree requirements for other departments of the university.

The curricula encompasses courses leading to the Bachelor of Arts degree in modern Foreign Languages, with options in French or Spanish and Accounting with Business Administration or Office Administration, and Latin American Area Studies. An interdisciplinary program, leading to the Bachelor of Science degree in Arts and Sciences, is also available to students who follow the degree requirements listed under the heading, "General Degree Program."

"C" is the lowest acceptable grade for the departmental majors and minors in any required foreign language course. Courses in which majors or minors receive "D" or below must be repeated. Moreover, a student in the certification program is required to maintain an average of 2.25 in the major courses.

The department offers a minor in French, Spanish, or German. Other courses to satisfy degree requirements in Accounting, Business Administration, or Office Administration are as follow:

### ALL ELEMENTARY AND INTERMEDIATE COURSES MUST BE TAKEN IN SEQUENCE.

#### A. French or Spanish option with Certification

A student who elects an option in French or Spanish, in addition to the Teacher Education professional core requirements, must complete a minimum of twenty-five hours in courses numbered above 202 in the target language to include 300, 301-02, 311-12, 400, 401-02, 410, 420, and 450. It is desirable that the student complete a minor in a second foreign language.

#### B. French or Spanish option without Certification.

A student who chooses an option in French or Spanish must complete a minimum of thirty hours in the target language in courses numbered above 202 to include 300, 301-02, 311-12, 400, 401-02, 410, 420, and 450. It is desirable that the student complete a minor, preferably in a second foreign language.

#### C. French or Spanish and Business Administration.

Required courses in a foreign language are 101-02, 201-02, 300, 301-02, 400, 420, 450, and 480. The business core includes—QM201, QM215, MG301, 302, MK301, ACCTG 211-212, ECON 211-12, and BE 315.

#### D. Latin American Area Studies

The required courses in Spanish are 101-02, 201-02, 300, 301-02, 400, 401-02, 410, 420, and 450. A minor concentration in Government and Public Affairs will be completed along with appropriate courses in Economics, Geography and History.

#### E. French, German, or Spanish Minor

For students who are in the Teacher Education Program, the courses required are 101-02, 201-02, and any three courses above the 200 level. In addition to the requirements just outlined, students who are not in the certification program should also complete one additional course above the 200 level.

#### F. Honor Societies

1. Eta Sigma Chapter of Alpha Mu Gamma, National Foreign Language Honor Society welcomes into membership qualified lower level students in French, German and Spanish.
2. Beta Omicron Chapter of Phi Delta Phi, National French Honor Society for outstanding students in upper level French.
3. Gamma Eta Chapter of Sigma Delta Pi, National Spanish Honor Society for students who excel in upper level Spanish.

### CURRICULUM FOR INTERDISCIPLINARY OPTIONS IN FRENCH OR SPANISH AND BUSINESS ADMINISTRATION

FRESHMAN YEAR	Credit Hours	
	Fall	Spring
FOR LANG 101-2 .....	4	4
ENG 101-2 .....	3	3
MATH 111-112 .....	4	3
HIST 201-2 .....	3	3
ORIENTATION .....	1	
ART 133 .....		2
PE or AERO .....	1	1
	16	16

SOPHOMORE YEAR	Credit Hours	
	Fall	Spring
FOR LANG 201-2 .....	3	3
FOR LANG 300 .....		2
SCI .....	3	3
ENG 211-212 .....	3	3
AC 211-212 .....	3	3
EC 211-212 .....	3	3
MUS 131 .....	2	
	17	17



JUNIOR YEAR	Credit Hours	
	Fall	Spring
FOR LANG 301-2 .....	3	3
QM 201, 215 .....	3	3
BE 315, MG 323 .....	3	3
MK 301 .....		3
MG 301, 302 .....	3	3
PHIL 340 .....		3
Elective (300-400) .....	6	
	18	18

SENIOR YEAR	Credit Hours	
	Fall	Spring
FOR LANG 400 .....	3	
FOR LANG 450 .....	3	
FOR LANG 480 .....		3
FOR LANG 420 .....		2
BL 300, FN 330 .....	3	3
BA 423, MG 450 .....	3	3
Electives (300-400) .....	6	6
	18	17

Students may enroll with a double major:

- A foreign language and Business Administration
- A foreign language and English
- A foreign language and Political Science
- A foreign language and Communications
- A foreign language and History

CURRICULUM IN FRENCH  
(With Teacher Certification)

FRESHMAN YEAR	Credit Hours	
	Fall	Spring
FR 101-2 .....	4	4
ENG 101-2 .....	3	3
HIST 201-2 .....	3	3
MATH 111 .....	4	
EDCI 201 .....		3
ORIENTATION 100 .....	1	
HLTH or NTR .....		2
ART 133 .....		2
PE or AERO .....	1	1
	16	18

SOPHOMORE YEAR	Credit Hours	
	Fall	Spring
FR 201-2 .....	3	3
FR 300 .....		2
ENG 211-2 .....	3	3
SCI .....	3	3
Minor or Electives .....	3	3
PSY 242 .....	3	
MUS 131 .....		2
PE or AERO .....	1	1
	16	17

JUNIOR YEAR	Credit Hours	
	Fall	Spring
FR 301-2 .....	3	3
FR 311-12 .....	3	3
FR 400 .....	3	
EDCI 301 .....	3	
PSY 312 .....		3
Minor or Electives .....	3	3
Minor or Electives (300-400) .....		3
GEOG 172 .....		3
EDSE 465 .....		3
	15	21

SENIOR YEAR	Credit Hours	
	Fall	Spring
FR 401 .....	3	
FR 410 .....	3	
FR 450 .....	3	
EDCI 387 .....	3	

Minor or Electives (300-400)	6	
	Fall	Spring
MFL 371 .....		3
EDRD 491 .....		3
EDCI 472S .....		9
	18	15

CURRICULUM IN SPANISH  
(With Teacher Certification)

FRESHMAN YEAR	Credit Hours	
	Fall	Spring
SPN 101-2 .....	4	4
ENG 101-2 .....	3	3
HIST 201-2 .....	3	3
MATH 111 .....	4	
EDCI 201 .....		3
ORIENTATION .....	1	
HEA or NUTR .....		2
ART 133 .....		2
PE or AERO .....	1	1
	16	18

SOPHOMORE YEAR	Credit Hours	
	Fall	Spring
SPN 201-2 .....	3	3
SPN 300 .....		2
ENG 211-2 .....	3	3
SCI .....	3	3
Minor or Electives .....	3	3
PSY 242 .....	3	
MUS 131 .....		2
PE or AERO .....	1	1
	16	17

JUNIOR YEAR	Credit Hours	
	Fall	Spring
SPN 301-2 .....	3	3
SPN 311-12 .....	3	3
SPN 400 .....	3	
EDCI 301 .....	3	
PSY 312 .....		3
Minor or Electives .....	3	3
GEOG 172 .....	3	
EDSE 465 .....		3
	18	15

SENIOR YEAR	Credit Hours	
	Fall	Spring
SPN 401 .....	3	
SPN 410 .....	3	
SPN 450 .....	3	
EDCI 387 .....	3	
Minor or Electives (300-400) .....	3	
Minor or Electives (300-400) .....	3	
MFL 371 .....		3
EDRD 491 .....		3
EDCI 472S .....		9
	18	15

CURRICULUM IN FRENCH  
(Without Teacher Certification)

FRESHMAN YEAR	Credit Hours	
	Fall	Spring
FR 101-2 .....	4	4
ENG 101-2 .....	3	3
HIST 201-2 .....	3	3
MATH 111 .....	4	
EDCI 201 .....		3
ORIENTATION 100 .....	1	
HEA or NTR .....		2
ART 133 .....		2
PE or AERO .....	1	1
	16	18

SOPHOMORE YEAR	Credit Hours	
	Fall	Spring
FR 201-2 .....	3	3
FR 300 .....		2
ENG 211-12 .....	3	3
SCI .....	3	3
PSY 242 .....	3	
Minor or Electives .....	3	3
MUS 131 .....		2
PE or AERO .....	1	1
	18	15-17

JUNIOR YEAR	Credit Hours	
	Fall	Spring
FR 301-2 .....	3	3
FR 311-12 .....	3	3
FR 400 .....	3	
Minor or Electives .....	3	3
Minor or Electives (300-400) .....		3
Electives (300-400) .....		
Humanities and Social Sciences .....	6	6
	18	18

SENIOR YEAR	Credit Hours	
	Fall	Spring
FR 401-2 .....	3	3
FR 410-20 .....	3	2
FR 450 .....	3	
Minor or Electives 300-400 .....	3	3
Minor or Electives 300-400 .....	3	3
Electives (300-400) .....	3	4-6
	18	15-17

CURRICULUM IN SPANISH  
(Without Teacher Certification)

FRESHMAN YEAR	Credit Hours	
	Fall	Spring
SPN 101-2 .....	4	4
ENG 101-2 .....	3	3
HIST 201-2 .....	3	3
MATH 111 .....	4	
EDCI 201 .....		3
ORIENTATION .....	1	
HEA or NTR .....		2
ART 133 .....		2
PE or AERO .....	1	1
	16	18

SOPHOMORE YEAR	Credit Hours	
	Fall	Spring
SPN 201-2 .....	3	3
SPN 300 .....		2
ENG 211-12 .....	3	3
SCIENCE .....	3	3
PSY 242 .....	3	
Minor or Electives .....	3	3
MUS 131 .....		2
PE or AERO .....	1	1
	16	17

JUNIOR YEAR	Credit Hours	
	Fall	Spring
SPN 301-2 .....	3	3
SPN 311-12 .....	3	3
SPN 400 .....	3	
Minor or Electives .....	3	3
Minor or Electives 300-400 .....		3
Electives (300-400) .....		
Humanities and Social Sciences .....	6	6
	18	18

SENIOR YEAR	Credit Hours	
	Fall	Spring
SPN 401-2 .....	3	2
SPN 410-20 .....	3	2



SPN 450 .....	3	
Minor or Electives 300-400 .....	3	3
Minor or Electives 300-400 .....	3	3
Electives (300-400) .....	3	4-6
	18	14-16

### CURRICULUM IN LATIN AMERICAN AREA STUDIES

FRESHMAN YEAR	Credit Hours	
	Fall	Spring
SPN 101, 102 .....	4	4
GPA 100, 221 .....	3	3
MATH 111, 112 .....	4	3
PE or AERO .....	1	1
ENG 101-102 .....	3	3
ART, MUS, DRAMA, PHIL .....		2
ORIENTATION 101 .....	1	
	16	16

SOPHOMORE YEAR	Credit Hours	
	Fall	Spring
SPN 201-202 .....	3	3
SPN 300 .....		2
SCI, BIO, CHEM .....	4	4
PE or AERO .....	1	1
ENG 211, 212 .....	3	3
HIST 201, 202 .....	3	3
SOC 310 .....	3	
ART, MUS, SPCH, PHIL .....		2
	17	18

JUNIOR YEAR	Credit Hours	
	Fall	Spring
SPN 301-302 .....	3	3
SPN 400 .....	3	
GPA 300, 315 .....	3	3
HIST 451, 452 .....	3	3
GEOG 372, 373 .....	3	3
EC 211, 212 .....	3	3
Elective (300-400) .....		3
	18	18

SENIOR YEAR	Credit Hours	
	Fall	Spring
SPN 401, 402 .....	3	3
GPA 363-367 .....	3	3
SPN 410, 420 .....	3	2
MFL 450 .....	3	
EC 410 .....	3	
Electives (300-400) .....	3	6
	18	14

### COURSE DESCRIPTIONS FRENCH

**Elementary French 101-102 (4,4)** The development of the ability to understand, speak, write and read French. Laboratory work is an integral part of the course.

**Intermediate French 201-202 (3,3)** Grammar review and further development of the ability to understand, speak, write and read French, reinforced with laboratory work. Prerequisites: 101-102 or the equivalent.

**Pronunciation and Diction 300 (2)** The development of good articulatory habits through perception and imitation of French sounds, with secondary emphasis on theoretical knowledge of the phonetic symbols. Prerequisite: French 201.

**Advanced Oral and Written Composition 301-302 (3,3)** Vocabulary building and intensive analysis of French grammar with practical application in oral and written compositions. Prerequisite: French 202.

**Survey of French Literature 311 (3)** Literary philosophies, types, major authors and their contributions. Middle Ages through the Eighteenth Century. Prerequisite: French 202.

**Survey of French Literature 312 (3)** Literary philosophies, types, major authors and their contributions. The Nineteenth and Twentieth Centuries. Prerequisite: French 202.

**Foreign Language Pronunciation and Diction 320 (3)** Basic rudiments of the sound systems in three or four languages.

**Methods of Teaching Foreign Languages 371 (3)** This course acquaints the student with methods, materials, and texts. Bi-weekly classroom observations in secondary schools of the community are required. Prerequisite for those who wish to obtain teacher certification.

**Francophone Civilizations 400 (3)** The development of Francophone civilizations from their origins to the present: geography, historical, political, social, economic and cultural life.

**French Conversation 401-402 (3,3)** Intensive conversational practice with group discussion and laboratory drills on selected topics. Analysis and correction of individual problems. Prerequisite: French 202.

**Black French Writers: Past and Present 410 (3)** An introduction to the works of various Black authors of French expression, with emphasis on Alexandre Dumas, Rene Maran, Leon Damas, Aimé Césaire, Leopold Senghor and Frantz Fanon.

**Introduction to Explication de Textes 420 (3)** Designed to acquaint the student with the French approach to analyzing poetry and prose.

**French Literature of the Twentieth Century 425-426 (3,3)** Prose, poetry, theatre, criticism, their theories and trends, from the Symbolist movement to contemporary period. Prerequisite: French 400.

**Senior Project 450. (3)** Individual research and project writing.

**Independent Study 470 (1 to 3 hours per semester)**

**Commercial French 480 (3)** Designed to train students to write effective business letters in correct styles and languages. Prerequisite: French 302.

### GERMAN

**Elementary German 101-102. (4-4)** Aims to develop the ability to speak, understand, write, and read simple German. A functional vocabulary is built up and the essentials of grammar are stressed. Laboratory work is included in this course. It is also supplemented with graded reading.

**Intermediate German 201-202. (3,3)** Consists of intensive and extensive reading of graded German works (literary and scientific). Fluency and accuracy of comprehension are the primary objectives. Prerequisite: German 101-102.

**Survey of German Literature 311-312. (3,3)** Consists of selected readings to acquaint the student with outstanding writers, ideas and movements from the eleventh century to the present.

**Foreign Language Pronunciation and Diction 320. (3)** Basic rudiments of sound system in three to four languages.

### SPANISH

**Elementary Spanish 101-102. (4,4)** The development of the ability to understand, speak, write and read Spanish. Laboratory is an integral part of this course.

**Intermediate Spanish 201-202. (3,3)** Grammar review and further development of the ability to understand, speak, write, and read Spanish, reinforced with laboratory work. Prerequisite: Spanish 101-102.

**Pronunciation and Diction 300. (2)** The development of good articulatory habits through perception, imitation, and intensive drill with secondary emphasis on theory and phonetic symbols. Prerequisite: Spanish 201.

**Advanced Oral and Written Composition 301-302. (3,3)** Vocabulary building and intensive analysis of Spanish with practical application in oral and written composition. Prerequisite: Spanish 202.

**Survey of Spanish Literature 311. (3)** Literary philosophies, types, major authors and their contributions from the earliest extant works through the sixteenth century. Prerequisite: Spanish 202.

**Survey of Spanish Literature 312. (3)** Literary philosophies, types, major authors and their contributions from the seventeenth century through the contemporary period.

**Foreign Language Pronunciation and Diction 320. (3)** Basic rudiments of the sound system in three to four languages.

**Methods of Teaching Foreign Languages 371. (3)** This course acquaints the student with methods, materials, and texts. Bi-weekly classroom observations in secondary schools of the community are required. Prerequisite for those who wish to obtain teacher certification. Field Experience Required.

**Hispanic Civilization 400. (3)** The history and development of the civilization, culture and institutions of Spain and the Spanish American countries.

**Spanish Conversation 401-402. (3,3)** Intensive conversational practice with group discussions and drills on selected topics. Analysis and correction of individual problems. Prerequisite—Spanish 202.

**Readings in Spanish-American Literature 410. (3)** Involves selected readings to give the student a panoramic view of representative authors, works, and movements from the colonial period to the present.

**Applied Stylistics 420. (2)** An intensive course in composition to aid the student in developing an individual style of writing in the Spanish language. Prerequisite: Spanish 302.



**Spanish Literature of the Nineteenth Century. 421-422. (3,3)** Principal literary movements and cultural highlights studied by analysis of the most representative authors of the period. Prerequisite: Spanish 400.

**Spanish Literature of the Twentieth Century. 425-426. (3,3)** Reading and analysis of the works of the "Generación del '98" and of the post-war generation. Comprehensive study of all literary genres, especially of the novel and lyric poetry. Prerequisite: Spanish 400.

**Senior Project 450. (3)** Individual research and project writing.

**Independent Study 470. (1-1-1).**

**DEPARTMENT OF MUSIC**  
**Ralph R. Simpson,**  
**Ph.D., Head**

The Department of Music is organized to service the State's music education structure through teacher education, leadership, and statewide cooperation; to provide sound guidance and thorough training for the gifted student whose career goal is professional music; and to bring the gift of music in exhibits, lecture demonstrations, concert offerings, and participation opportunities to all its people, as its contribution to the cultural enrichment of the campus, the community, and the state.

The courses are designed to provide experiences leading to general culture, a mastery of fundamental tools, adequate performance ability, and for those seeking certification in the area of music, the science and art of teaching.

The Department of Music holds full membership in the National Association of Schools of Music. The Department offers undergraduate programs in music leading to the Bachelor of Science degree in music with or without certification. The minimum number of semester hours required for the Bachelor Science degree is 132. Minimum number of semester hours required in music courses is 53 for the Bachelor of Science degree.

The minimum number of semester hours in 300-400 level courses is 60 for all bachelor degree programs.

**APPLIED MUSIC**  
Applied music is defined as individual instruction and preparation in voice and the various instruments. Courses are offered in voice, piano, organ, violin, viola, violoncello, string bass, flute, oboe, clarinet,

bassoon, saxophone, French horn, cornet (trumpet), trombone, tuba and the percussion instruments. Each student must declare a major applied area of performance and must concentrate in this area for the equivalent of four years, and must present a senior recital during the senior year. It is expected that each student will make appearances on seminars and student recitals during the sophomore and junior years. For all students majoring in some instrument other than piano, it is expected that piano will be the minor performance area. In most instances the choice of the major applied area and curriculum will be governed by the proficiency that the student has achieved prior to entering the University.

**ENSEMBLES**  
Membership in music ensembles is open to all students of the University who qualify for admission and participation. Each music major is required to participate in a major ensemble for the entire duration of his matriculation. Membership is not limited to one ensemble, but instrumental majors must participate in University Band and vocal majors must participate in University Choir. One credit per semester is offered for each group.

The following ensembles are offered: University Choir, University Band, Brass Choir, Stage Band, and String Ensemble. These groups are organized to study and perform the standard repertoire for various combinations of voices or instruments.

**CONCERTS AND RECITALS**  
Organized music groups, small ensemble groups, faculty and student soloists offer concerts and recitals frequently in the Recital Hall. These are open to the public without charge, and students are particularly encouraged to attend.

**DEGREE PROGRAMS**  
The Department of Music offers three curricula leading to the Bachelor of Science degree in Music. The first of these is the degree without certification, for those with career goals other than teaching. The other two programs lead to certification in the areas of vocal or instrumental music.

CURRICULUM FOR A MAJOR IN MUSIC WITHOUT CERTIFICATION		
FRESHMAN YEAR		
	Credit	Hours
	Fall	Spring
ENG 101, 102 .....	3	3
HIST 201, 202 .....	3	3
MUS 120, 121 .....	4	4
MAJ APPLIED .....	2	2
MAJ ENSEMBLE .....	1	1
MATH 111, 112 .....	4	3
PE or AERO .....	1	1
	18	17

SOPHOMORE YEAR		
	Credit	Hours
	Fall	Spring
ENG 211, 212 .....	3	3
MAJ APPLIED .....	2	2
MAJ ENSEMBLE .....	1	1
MUS 220, 221 .....	3	3
SCI .....	3	3
WW or BRASS CLASS .....	1	1
FOR LANGUAGE OR ELECTIVE .....	4	4
PE OR AERO .....	1	1
	18	18

JUNIOR YEAR		
	Credit	Hours
	Fall	Spring
MUS 337, 338 .....	3	3
MUS 305, 430 .....	3	3
MAJ APPLIED (300 level) .....	2	2
MAJ ENSEMBLE (300 level) .....	1	1
MUS 331, 320 .....	3	3
FOR LANGUAGE OR ELECTIVE .....	3	3
HUMANITIES Elective (300 level) .....	3	3
	18	18

SENIOR YEAR		
	Credit	Hours
	Fall	Spring
MUS 420, 421 .....	3	3
HEA .....		2
MAJ APPLIED (400 level) .....	2	2
HUMANITIES ELECTIVES (300-400 level) .....	12	6
Electives (300-400 level) .....		3
	17	16

Electives in Music:  
  
Music 428—Physics of Music—3 sem. hrs.  
Music 433—Composition—3 sem. hrs.  
Music 434—Seminar in Jazz—3 sem. hrs.

CURRICULUM FOR MAJOR IN MUSIC WITH CERTIFICATION (Vocal and Instrumental Concentration)		
FRESHMAN		
	Credit	Hours
	Fall	Spring
ENG 101, 102 .....	3	3
HIST 201, 202 .....	3	3
MUS 120, 121 .....	4	4
INSTR TEACH .....	1	
MUS 11A, 11B .....	1	1
MAJ APPLIED .....	2	2
MAJ ENSEMBLE .....	1	1
PE or AERO .....	1	1
	16	15
SOPHOMORE YEAR		
	Credit	Hours
	Fall	Spring
ENG 211, 212 .....	3	3
EDCI 201, Psy 242 .....	3	3
SCI .....	3	3
MUS 220, 221 .....	3	3
MUS 21A, 21B .....	1	1
MAJ APPLIED .....	2	2
MAJ ENSEMBLE .....	1	1
PE or AERO .....	1	1
MUS 313 .....	1	
	18	17



JUNIOR YEAR	Credit Hours	
	Fall	Spring
EDCI 301, EDSE 465 .....	3	3
ART 133 430 .....	2	3
MUS 337, 320 .....	3	3
MUS 305, 371A .....	3	3
MUS 331, 338 .....	2	3
MAJ APPLIED (300 level) .....	2	2
MAJ ENSEMBLE (300 level) .....	1	1
	16	18

SENIOR YEAR	Credit Hours	
	Fall	Spring
HEA .....	2	
MATH 111 .....	4	
PSY 312 .....	3	
MUS 311, 421 .....	1	3
MUS 451 .....	2	
MUS 420 .....	2	
MUS 371B or C .....		3
EDRD 491 .....		3
MUS 472 .....		9
MAJ APPLIED (400 level) .....	2	
MAJ ENSEMBLE (400 level) .....	1	
	17	18

### CURRICULUM FOR MAJOR IN MUSIC WITH CERTIFICATION (Piano Concentration)

FRESHMAN YEAR	Credit Hours	
	Fall	Spring
ENG 101, 102 .....	3	3
HIST 201, 202 .....	3	3
MUS 120, 121 .....	4	4
INSTR TECH .....	1	1
MUS 11A, 11B .....	2	2
MAJ ENSEMBLE .....	1	1
PE or AERO .....	1	1
	15	15

SOPHOMORE YEAR	Credit Hours	
	Fall	Spring
ENG 211, 212 .....	3	3
EDCI 201; PSY 242 .....	3	3
SCI .....	3	3
MUS 220, 221 .....	3	3
MUS 21A, 21B .....	2	2
MAJ ENSEMBLE .....	1	1
PE or AERO .....	1	1
HLTH, MUS 311 .....	2	1
	18	17

JUNIOR YEAR	Credit Hours	
	Fall	Spring
EDCI 301; 465 .....	3	3
ART 133 .....	2	
MUS 337, 320 .....	3	3
MUS 305, 371A .....	3	3
MUS 312, 338 .....	1	3
MUS 31A, 31B .....	2	2
MUS 131, 430 .....	2	3
MAJ ENSEMBLE (300 level) .....	1	1
	16	18

SENIOR YEAR	Credit Hours	
	Fall	Spring
SOC SCI .....	3	
MATH 111 .....	4	
PSY 312 .....	3	
MUS 41A .....	2	
MUS 451, 371C .....	2	3
MUS 420, 421 .....	3	3
MAJ ENSEMBLE (400 level) .....	1	
EDRD 491 .....		3
MUS 472 .....		9
	18	18

### COURSE OFFERINGS MUSIC (MUS) APPLIED MUSIC COURSES

The laboratory fees, unless otherwise stated, are for each semester.

**Mus 11A, B First Year Piano. (1-1)** Some of the easier works of Bach, Haydn, Mozart, Beethoven, and others whose works are of equivalent technical value together with purely technical materials including all majors and minor scales. Prerequisite: Permission from the Office of the Music Department. Two one-half hour periods. Laboratory fee \$15.00.

**Mus 21A, B Second Year Piano. (1-1)** Selected works Bach, and other composers. Prerequisite: Permission from the Office of the Music Department, and Piano 11B. Two one-half hour periods. Laboratory fee \$15.00.

**Mus 31A, B Third Year Piano. (2-2)** Larger compositions, and other exacting materials requiring excellent musicianship, skills and techniques are used. Prerequisite: Music 21B. Two one-half hour periods. Laboratory fee \$15.00.

**Mus 41A, B Fourth Year Piano. (4)** The study of advanced piano materials. Prerequisite: Music 41B. Two one-half hour periods. Laboratory fee \$15.00.

**Mus 12A, B First Year Organ. (2)** Pedal studies, major and minor scales, legato studies, little preludes and fugues of Bach, trios by Stainer Rheinberger, and other selected books of Guilman, Mendelssohn and other reputable composers. Prerequisite: The highest non-credit level of piano 10, and permission from the Office of the Music Department. Two one-half periods. Laboratory fee \$15.00.

**Mus 22A, B Second Year Organ. (2)** Advanced pedal studies and repertoire. Prerequisite: Music 12C. Two one-half hour periods. Laboratory fee \$15.00.

**Mus 32A, B Third Year Organ. (4)** A continuation of technical studies, and major works, some from modern composers. Prerequisite: Music 22B. Two one-half hour periods. Laboratory fee \$15.00.

**Mus 42A, B. Fourth Year Organ. (4)** A continuation of Music 32B with special emphasis on representative works from the various schools of composition including 20 Century composers. Two one-half hour periods. Laboratory fee \$15.00.

**Mus 13A, B First Year Violin. (2)** Instruction with standard elementary violin or viola materials. Prerequisite: Permission from the Office of the Music Department. Two one-half hour periods. Laboratory fee \$15.00.

**Mus 23A, B. Second Year Violin or Viola. (2)** Instruction with standard elementary violin or viola materials. Prerequisite: Music 13B. Two one-half hour periods. Laboratory fee \$15.00.

**Mus 33A, B Advanced Violin or Viola. Mus 43A, B (4)** Instruction with standard advanced violin or viola materials. Prerequisite: Music 23B. Two one-half hour periods. Laboratory fee \$15.00.

**Mus 14A, B First Year Voice. (2)** The study of breath control, and voice placement in tone production. Prerequisite: Permission from the Office of the Music Department. Two one-half hour periods. Laboratory fee \$15.00.

**Mus 24A, B Second Year Voice (2)** The study of voice drills in voice placement intonation, breathing, phrasing, diction, etc. Prerequisite: Music 14C. Two one-half hour periods. Laboratory fee \$15.00.

**Mus 34A, B Third and Fourth Year Voice, Mus 44A, B. (4)** The study of drills in vocal techniques. Prerequisite: Music 24B. Two one-half hour periods. Laboratory fee \$15.00.

**Mus 15A, B. First Cornet (Trumpet or French Horn). (4)** Instruction with standard elementary materials. Prerequisite: Permission from the Office of the Music Department. Two one-half hour periods. Laboratory fee \$15.00.

**Mus 25A, B Second Year Cornet (Trumpet or French Horn). (2)** The study of standard intermediate materials. Prerequisite: Music 15B. Two one-half hour periods. Laboratory fee \$15.00.

**Mus 35A, B Third and Fourth Year Cornet (Trumpet or French Horn), Mus 45A, B. (4)** Instruction with standard advanced materials. Two one-half periods. Laboratory fee \$15.00.

**Mus 16A, B First Year Trombone (Baritone Horn or Tuba.) (2)** Instruction with standard elementary materials. Prerequisite from the Office of the Music Department. Two one-half hour periods. Laboratory fee \$15.00.

**Mus 26A, B Second Year Trombone (Baritone or Tuba.) (2)** The study of standard intermediate materials. Prerequisite: Trombone 16B. Two one-half hour periods. Laboratory fee \$15.00.

**MUS 36A, B Third and Fourth Year Trombone (Baritone or Tuba). (2-2)** Instruction Mus 46A, B with standard advanced materials. Two one-half hour periods. Laboratory fee \$15.00.

**Mus 17A, B First Year Clarinet (or Flute). (2)** Instruction with standard elementary materials. Prerequisite: Permission from the Office of the Music Department. Two one-half hour periods. Laboratory fee \$15.00.

**Mus 27A, B Second Year Clarinet (or Flute). (2)** The study of standard intermediate materials. Prerequisite: 17B. Two one-half hour periods. Laboratory fee \$15.00.

**Mus 37A, B Third and Fourth Year Clarinet (or Flute), Mus 47A, B. (2-2)** Instruction with standard advanced materials. Two one-half hour periods. Laboratory fee \$15.00.

**Mus 18A, B First Year Oboe (or Bassoon). (2)** The study of standard elementary materials. Prerequisite: Permission from the Office of the Music Department. Two one-half hour periods. Laboratory fee \$15.00.

**Mus 28A, B Second Year Oboe (or Bassoon). (2)** Instruction with standard intermediate materials. Prerequisite: Oboe 18C. One-half hour periods. Laboratory fee \$15.00.



**Mus 38A, B Third and Fourth Year Oboe (or Bassoon).** (2-2) Individual instruction Mus 48A, B with standard advanced materials. Two one-half hour periods. Laboratory fee \$15.00.

**Mus 19A, B First Year Saxophone.** (2) The study of standard elementary materials. Prerequisite: Permission from the Office of the Music Department. Two one-half hour periods. Laboratory fee \$15.00.

**Mus 29A, B Second Year Saxophone.** (2) The study of standard elementary materials. Prerequisite: Saxophone 19C. Two one-half hour periods. Laboratory fee \$15.00.

**Mus 39A, B Third and Fourth Year Saxophone.** (2-2) Instruction with standard advanced materials. Two one-half hour periods. Laboratory fee \$15.00.

**Mus 10A, B First Year Percussion.** (2) An intensive study of elements of percussion technique. Accent will be on snare drum rudiments. One full hour, or two half hour lessons per week. Permission of Department of Music. Laboratory fee \$15.00.

**Mus 20A, B Second Year Percussion.** (2) Continuation of above. Attention to bass drum and tampani. One full-hour instruction per week. Laboratory fee \$15.00.

**Mus 30A, B Third Year Percussion.** (2-2) Intermediate materials for percussionist. Review of all rudiments, introduction of solo and ensemble materials for percussion. Attention to tuned percussion instruments. One full hour instruction per week. Laboratory fee \$15.00.

**Mus 40A, B Fourth Year Percussion.** (2-2) Advanced technique and literature for solo percussion instruments and percussion ensembles. Emphasis on recital literature in preparation for Senior Recital. Laboratory fee \$15.00.

**Mus 305, 306. Orchestral Conducting.** (3-3) A study of the technique of conducting with particular emphasis on the use of the baton, score reading, program planning, and rehearsal procedures. An evaluation of orchestral and other instrumental music suitable for use in secondary schools. Prerequisite: Junior standing in Department of Music. Three lectures.

**Mus 310. Brass Technics.** (1) Fundamentals of care, construction, minor repair and performance.

**Mus 311. Woodwind Technics.** (1) Fundamentals of tone production, technique, care, construction, and minor repair. Prerequisite: Permission of the Office of the Music Department. Two periods.

**Mus 312. Vocal Technics.** (1) The study of techniques of vocal tone production, breathing, articulation, enunciation and pronunciation as applied to the training of choral groups.

**Mus 313. String Technics.** (1) The study of the fundamentals of bowing, fingering, construction and care of string instruments. Two periods.

**Mus 314. Percussion Technics.** (1) Fundamentals of care and minor repair; study of technique of performance on most percussion instruments with emphasis on the snare drum. Two periods.

struments with emphasis on the snare drum. Two periods.

**Mus 316. Opera Workshop.** (3) An introduction to operatic performance to include acting, movement, and staging various opera and operatic scenes. Three sessions per week. Enrollment by permission of instruction.

## MAJOR ENSEMBLES

**Mus 002. String Ensemble.** (1) The study and the performance of representative literature for string ensemble and small orchestra with special emphasis on material suitable for beginning string programs for the public is required for all string majors, open to all students with proficiency on a string instrument. Two (2) rehearsals per week.

**Mus 003. University Choir.** (1) The study of a variety of the finest choral literature. Prerequisite: Permission from the Office of the Music Department. Three or more periods.

### (FALL SEMESTER)

**Mus 004A. University Marching Band.** (1) Admission by audition and permission of the Director of Bands. The study and performance of marching routines, performance styles designed for live, film and televised performances. Meet daily 3:00-5:00 p.m. Extra rehearsals as called.

### (SPRING SEMESTER)

**Mus 004B. Concert Band** (1) Admission by permission of the Director of Bands. A concerting group made up of those bandmen who exhibit traits of outstanding musicianship, and an interest in performing the finest of literature for concerting bands. This ensemble will conduct tours, broadcast, record, and appear in formal concerts on the campus. Meets daily —3:30-5:00 p.m.

**Mus 005. Stage Band (Jazz Ensemble).** (1) Membership open to all University students by audition and competition. Activities include a study of playing techniques necessary for the performance of contemporary music for stage and recording, popular dance shows, show music, experimental music, and traditional and contemporary jazz-black music. Music majors must maintain concurrent membership in University Marching or Concert Band. Two (2) rehearsals per week.

**Mus 006. TSU Singers** (1) Devoted to the study of contemporary and popular literature for mixed voices, with wood-wind, brass, and percussion accompaniment. Membership by audition and/or permission of instructor, and limited to twenty-five singers.

## MUSIC EDUCATION

**Mus 301. Introduction to Public School Music.** (3) An introductory course in music for students in elementary education. Consists of a thorough study in music fundamentals, terminology, scales, keys, rhythms, and sight singing drills and dictation. No prerequisite.

**Mus 371A. Music Education.** (3) A study of principles, methods, materials, objectives, and procedures for teaching music in secondary schools. Prerequisite: Junior standing in Department of Music. Three lectures. Field experience required.

**Mus 371B. Choral Methods and Materials.** (3) A study of principles and problems of teaching voice, managing and directing choral organizations, and analysis and evaluation of choral materials. Prerequisite: Permission from the Office of the Music Department. Three lectures. Field experience required.

**Mus 371C. Instrumental Methods.** (3) A study of methods, philosophies, materials, and objectives for teaching instrumental music from grade four (4) through grade twelve (12). Prerequisite: Junior Standing Department of Music. Three lectures.

**Mus 434. Seminar in Jazz.** (2) A study of the history of jazz and an analysis of the styles and major contributors. Two lectures.

## MUSIC HISTORY, LITERATURE, AND APPRECIATION

**Mus 131. Music Appreciation.** (2) Emphasis on the development of the student's appreciation for the finest musical literature, and a constant extension of his listening repertoire. Only that history which will serve to make what he hears more meaningful to him is included. Three lectures.

**Mus 321. History of Opera.** (3) Dramatic, vocal and orchestral elements in opera of Italian, French, and German schools from 1750 to present.

**Mus 340. Folk Music.** (3) Folk Music with emphasis upon that of the Southeastern United States.

**Mus 335. Introduction to Afro-American Music.** (3) History of blues, Gospel music, jazz, and African music with emphasis on black artists and their contributions.

**Mus 424-34. American Music.** (3-3) 4241- from Colonial Times through the music of Ives; 4251- from 1930 to the present.

**Mus 331. Introduction to Music Literature.** (3) An introductory course in Music Literature of all periods for Music Majors only. Course will consist of reading assignments covering the various periods of music with extensive outside listening experiences required. Three lectures per week.

**Mus 337-8. Music History and Literature.** (3-3) General information concerning the history of music. Embodies an analytic approach to music history, its growth and development. Prerequisite: Permission from the Office of the Music Department. Three lectures.

## THEORY AND COMPOSITION

**Mus 120-1. Freshman Theory.** (4-4) Basic notation, intervals, scales and modes, rhythms, contrapuntal harmony, written and keyboard, sight singing and ear training, harmonic and form analysis. Prerequisite: Pass the basic Theory Test. Five lectures.

**Mus 220-1. Sophomore Theory.** (3-3) Aural and written harmony; keyboard harmony; figured bass; counterpoint; sight singing; ear training; analysis. Prerequisite: Music 122. Three lectures.

**Mus 320. Counterpoints.** (3) A study of the techniques underlying the principles used in



writing good melodies and their association without losing independence. Prerequisite: Music 122. Three lectures.

**Mus 401. Practicum in Arranging. (2)** Individual projects supervised by a practicing professional arranger. Prerequisite: Consent of instructor.

**Mus 420-21. Form and Analysis. (3-3)** A study of compositions in the smaller and larger forms. Prerequisite: Music 321. Three lectures.

**Mus 428. Physics of Music. (3)** Theoretical and applied consideration of sound production and promulgation; the tempered scale, and other scales; the acoustical basis of wind and stringed instruments; analysis of complex tones produced by human voice and certain wind instruments. Prerequisite: Music 222. Three lectures.

**Mus 430. Orchestration. (3)** A systematic study and application of the techniques for utilizing the capabilities of orchestral and band instruments in Music Composition. Prerequisite: Music 321. Three lectures.

**Mus 433. Composition. (3)** A study of composition and the application of creative ability along systematic lines in writing original larger forms. Prerequisite: Permission from the Office of the Music Department. Three lectures.

**Mus 451. Senior Recital. (2)** Credit given only upon successful completion of public senior recital. Prerequisite: Permission of major applied instructor.

**Mus 000. Performance Seminar. (0)** Required for all music majors each quarter of matriculation during regular school year. For a satisfactory grade (S) each music major must attend 75+ of all scheduled recitals and seminars presented by student and faculty performers. First and third Thursday of each month.

## COMMERCIAL MUSIC

The program in Commercial Music is designed for serious students of craft of songwriting to learn with and from each other the techniques of melodic composition, harmonic structure and lyric writing within standard and deviant song forms.

**Music 140. Fundamentals of Music Theory. (3)** Theory and practice of basic elements of music.

**Music 141-42. Elements of Popular Song. (3,3)** Study of form, rhythm, melody, harmony, and lyrics in popular song. Analysis and Creative Writing. Must be taken in sequence. Prerequisite: Music 110 or equivalent.

**Mus 155-255. Solo Guitar. (1-2)** Instruction in guitar playing. These courses represent progressive development. Each course may be repeated a maximum of three times.

**Music 241-42. Intermediate Songwriting. (3,3)** Skills and techniques of crafting original material. Creative writing, analysis of standard songs, and critiquing works performed in class. Prerequisite: Music 142.

**Mus 300. Seminar in Songwriting. (3)** Individual creative and analytical projects in song-

writing. May be repeated for credit; no more than 9 hours may be applied toward a degree. Prerequisite: 142 and consent of instructor.



## DEPARTMENT OF PHILOSOPHY AND RELIGIOUS STUDIES

John Arthur, Ph.D.,  
Head

"Philosophy," said Kant, "is primarily concerned with three questions: What can I know? What ought I to do? What may I hope?" These broad questions suggest many problems that have puzzled some of the greatest thinkers in human history. Is belief in God rationally defensible? What is a just society? Can we know the truth? Is a human being more than a body and brain? Are we free? These, and many more, are the traditional problems of philosophy.

There are other philosophical problems whose origins are more recent. Advances in medical care have forced us to recon-

sider the definition of death. Advances in computer technology have stimulated a great deal of thought about artificial intelligence, and so led to a deeper understanding of the mind-body problem. The philosophy of natural and social science has also mushroomed, partly as a result of the successes of these disciplines. Discoveries in science, including evolution, computers and relativity theory, have had an impact on more traditional philosophical problems and have raised many new problems. Philosophy is thus a mixture of the old and new; many topics have been discussed since well before Christ, but others have their impetus in events as recent as the development of modern biomedical technology and computers.

Students who wish to concentrate in philosophy may do so by fulfilling the requirements for the General Degree Program in Arts and Sciences. Besides fulfilling these requirements, students should also take at least 24 upper division hours in philosophy for a major. Majors should include in those 24 hours both the History of Philosophy sequence (Phil. 310, 311, 312) and Logic and Critical Thinking (Phil. 250). Other courses should be selected so that the student acquires a background in a variety of areas of philosophy. Students wishing to minor in philosophy are required to take 12 upper division hours. All students interested in majoring or minoring in philosophy are encouraged to discuss their plans with an advisor.

The department also offers selected courses in religious studies. While these are not now sufficient to constitute a major or a minor, there are courses in many of the most popular fields of religious thought, including the Old Testament, the New Testament, world religions, and theology.

## COURSE DESCRIPTIONS

### PHILOSOPHY (PHIL)

**201. Introduction to Philosophy—Contemporary Moral Issues (3)** Abortion, preferential hiring, sex, animal rights, starvation, punishment, violence and pacifism, law and morality, civil disobedience. (Formerly Phil. 323).

**202. Introduction to Philosophy—Enduring Problems (3)** The justification and significance of religious beliefs; knowledge and truth; materialism and human nature; free-will and determinism. Includes historical and recent sources on the perennial issues in philosophy. (Formerly Phil. 324).



**210. Introduction to Film (3)** Aesthetic and philosophical issues in film theory and criticism; principles of film criticism; film and other art forms; and the relation to the audience to film experience. Aims toward understanding and appreciation of a major art form. Films exemplifying particular techniques and movements are viewed and discussed.

**211. History of Film. (3)** An historical study of the development of film as an art medium.

**250. Logic and Critical Thinking (3)** Informal fallacies in ordinary life; e.g., politics, editorials, advertising; language and its uses; analyzing extended arguments; introduction to inductive and deductive logic.

**251. Symbolic Logic (3)** Modern deductive logic: propositional, and quantificational; philosophy of logic.

**310. History of Philosophy, Ancient (3)** Development of philosophic thought from the Greeks to the Thirteenth Century.

**311. History of Philosophy, Modern (3)** Modern philosophy from Descartes through Kant.

**312. History of Philosophy, Contemporary (3)** Contemporary philosophy from Hegel to the present.

**320. History of Political Philosophy (3)** Selected political philosophers from classical Greece to 1900, including Plato, Aristotle, Machiavelli, Locke, and Rousseau.

**321. Contemporary Political Philosophy (3)** Recent works on the central issues in political philosophy: economic justice, rights, political authority.

**322. Marx and Socialism (3)** Traditional and contemporary communist political philosophers, including Marx, Lenin and Mao; historical materialism, exploitation; socialism and democracy.

**330. Ethical Theory (3)** Traditional and contemporary ethical theories; the meaning and justification of ethical language.

**335. Business Ethics (3)** Survey of major ethical issues arising in business; corporate social responsibility, corporate loyalty, government regulation and public interest, advertising, environmental responsibilities, preferential hiring, free-enterprise and social welfare.

**336. Medical Ethics (3)** A detailed consideration of various ethical issues in medicine and health care, including death and patients' rights, abortion, truth telling, experimenting on humans, religious conflicts, and the right to medical resources.

**340. Philosophical Ideas in Literature (3)** Philosophical issues, problems and assumptions in major literary works.

**341. Existentialism (3)** Contemporary and traditional Existential thinkers, including Sartre, Camus, and Kierkegaard.

**342. Aesthetics (3)** Problems in the philosophy of art and art criticism; aesthetic experience; truth and art; aesthetic value.

**400. Philosophy of Mind (3)** Consideration of various topics related to the existence and nature of mind: Mind-body identity, dualism, behaviorism, action theory, free-will and determinism.

**410. Philosophy of Religion (3)** The rationality of religious beliefs and practices; religious experience; the role of faith, religious language.

**420. Philosophy of Law (3)** Problems in the nature and justification of legal systems; natural law and legal positivism; theory of punishment.

**430. Philosophy of Science (3)** Problems in the nature of science and its relation to other human concerns, e.g., religion, politics, and ethics; the character of scientific theories and explanations in both natural and social science, scientific progress and truth.

**440. Special Topics (3)** Student or faculty generated course. Scope of subject matter to be determined by students and instructor.

**450. Undergraduate Readings and Research (3)** Individual study and research under faculty guidance. Prerequisite: 12 hours of upper division philosophy and permission of instructor.

## RELIGIOUS STUDIES (RS)

**200. Introduction to Religious Studies (3)** Current issues in Religious Studies: ethics, theology, history of religion.

**201. World Religions (3)** Introduction to selected themes in world religions, Eastern and Western.

**210. The Old Testament (3)** Origins, literature and beliefs of the Old Testament.

**211. The New Testament (3)** Origins, literature and beliefs of the New Testament. (Formerly Phil. 301).

**212. Jesus in History (3)** Ancient and modern portrayals of Jesus understood in their cultural contexts.

**330. Religion in America (3)** The role of religious institutions and practices in America; American theology; religion and social reform; varieties of religious expression.

**410. Contemporary Religious Thought (3)** Major themes, issues and thinkers. (Same as Philosophy 410).

## DEPARTMENT OF PHYSICS AND MATHEMATICS

**Raymond Richardson,  
Ph.D., Head**

### Departmental Objectives

The objectives of the Department are as follow: (1) To provide programs of study for those who desire to pursue an undergraduate major or minor in mathematics or physics, (2) to provide courses de-

signed to satisfy the mathematics and physics requirements for the several schools of the University, and (3) to provide services to the University and wider community which are required and appropriate.

The Department offers curricula leading toward two undergraduate degrees in mathematics and physics: Bachelor of Arts and Bachelor of Science.

### Objectives of the Mathematics Courses

The freshman courses for non-science majors are designed primarily to assist students to achieve (1) computational efficiency in the basic mathematical operations, (2) skill in the use of formulas for the solution of problems, and (3) the ability to translate some of the simpler problems of the real world into the symbolic language of mathematics.

The courses for science, engineering, and mathematics majors on the freshman and sophomore levels are intended to assist students to achieve skill in the formulation and solution of problems in algebra, trigonometry, analytic geometry, and calculus.

### Objectives in Physics Courses

The objectives of the physics courses are (1) to develop an appreciation of the application of the scientific method, (2) to develop a scientific picture of the physical world involving the relationship between matter and energy, (3) to develop the ability to think critically and logically.

Both sequences of introductory physics courses, Physics 211-2 and Physics 221-2-3, introduce the basic concepts of physics, but the former sequence requires a knowledge of calculus and the latter does not require calculus.

The upper-level physics courses treat special topics in physics, and there are both theoretical and experimental courses.

### Curriculum in Physics

Majors in physics are required to complete a minimum of 34 (33 for teacher education) semester hours of course work in physics, with a minimum of 25 (27 for teacher education) hours selected from physics courses numbered 300 and above.

### Curriculum in Mathematics

Majors in mathematics are required to complete a minimum of 34 semester hours of course work in mathematics exclusive of Mathematics 161, 191-2, 291-2. A minimum of 20 semester hours must be selected from courses numbered 300



and above. Students who minor in mathematics must complete a minimum of 10 semester hours selected from mathematics courses numbered 300 and above.

Required Courses

Mathematics 161-2, 163-4, 263-4, 361-2, 364 and 450 are required of all majors in the area of mathematics. Math 371 is required of all majors in the area of mathematics who are certifying. A minimum grade of "C" must be earned in each of the required courses.

Theoretical and Applied Programs.

Juniors and Seniors are offered two types of programs—theoretical and applied.

The theoretical program is designed primarily for students planning to do graduate study in pure mathematics. In addition to the required courses, their program should include mathematics 331-2, 451-2-3, 473 and selected topics from the Mathematics 480 series.

The applied program is designed for students planning to work in government or industry. In addition to the required courses, their program should include Mathematics 462-3-4, 453, 313 and selected topics from the Mathematics 480 series.

Departmental Awards for Scholarship.

The Department of Physics and Mathematics has two annual awards which are made to its majors. They are: The Mathematics-Physics Faculty Award. This award goes to the Senior major in the Department of Physics and Mathematics who has attained the highest cumulative average in four years. This award takes the form of an appropriately inscribed plaque.

The Sadie C. Gasaway Memorial Award. This award is given to the graduating major in mathematics with a grade point average of 3.25 or above who shows greatest promise on the basis of sustained evidence of self-development and of leadership ability. This award is provided by Miss Perlie Gasaway, a member of the faculty of the Department of Physics and Mathematics, in honor of her sister, the late Dr. Sadie C. Gasaway, who was Head of the Department of Physics and Mathematics for many years and was a member of the Department for 31 years.

Career Opportunities with a B.A. or B.S. degree in Mathematics

- 1. Mathematician in Government: Bureau of Mines Treasury Department National Bureau of Standards

- Census Bureau Coast and Geodetic Survey Department of Defense (Army, Navy, Air Force, Marine Corps) Others
- 2. Mathematician in Industry: Union Carbide IBM Western Electric Corp. Caterpillar Tractor Co. South Central Bell Telephone Co. Procter and Gamble Co. Honeywell General Motors Others
- 3. Statistician in Government
- 4. Actuary (additional formal training)
- 5. Engineer (additional on the job training)
- 6. Surveyor (additional on the job training)
- 7. Aeronautical Research Specialist (additional on the job training)
- 8. Computer Analyst
- 9. Teacher on Junior High and Senior High Level (with teacher certification)
- 10. Operations Research Specialist (additional on the job training)

Career Opportunities with B.S. Degree in Physics

Physics has such a broad scope and plays such a basic role in all science and engineering disciplines that the range of careers in physics probably exceeds that of any science degree major area. Some of the broad categories into which physics careers fall are listed below. Within each category, there are numerous fields of specialization

- Solid-State Physicist
- Nuclear Physicist
- Optical Physicist
- Elementar-Particle Physicist
- Atomic, Molecular, and Electron Physicist
- Fluid and Plasma Physicist
- Space and Planetary Physicist
- Acoustical Physicist
- Biophysicist
- Medical Physicist
- Astrophysicist
- Environmental Physicist

With a bachelor's or master's degree in physics, one is more likely to engage in design and development work, teaching, or administration than in research. In design and development work, employment would most likely be with an industrial firm, a government laboratory, or a non-profit research center to apply already-developed theories to specific problems. In teaching, with a bachelor's or master's degree, one would probably teach at a high school. Administrative positions are available with all types of work and employers, but for these positions one usually needs first either an on-the-job training program or experience in the field.

With a doctoral degree, one is prepared for a research career. The research program may fall anywhere in the range from "basic" or theoretical to "applied," depending upon his/her interests and those of his/her employer. Research at a college or university usually accompanies some teaching and is more likely to tend toward the basic end of the spectrum with less concern for immediate applications. At an industrial laboratory, research as part of a research team is more likely to tend toward the applied end of the spectrum, being somewhat directed by the interests of the company for which one works. Research at a government laboratory or a non-profit research center lies in the middle ground between an industrial laboratory and a college or university. All of these offer the opportunity for a challenging, productive research career.

Since physics training provides such a broad scientific background and the development of an analytical approach to the solution of problems, it is also excellent preparation for a variety of fields including:

- Electronics
- Engineering
- Computer Science
- Communications
- Energy Research and Development
- Medicine
- Law
- Business

CURRICULUM FOR MAJOR IN PHYSICS

FRESHMAN YEAR	Credit Hours	
	Fall	Spring
Eng 101-02 .....	3	3
Math 163-164 .....	4	4
Hist 201-02 .....	3	3
Chem 121-22 .....	4	4
Phy 191 .....	1	
PE or AERO .....	1	1
	16	15
SOPHOMORE YEAR	Credit Hours	
	Fall	Spring
Eng 211-12 .....	3	3
Math 263-4 .....	3	3
Phy 221-22 .....	4	4

CS 193, 291 .....	3	3
Hum Elect .....	2	2
PE or AERO .....	1	1
	16	16

JUNIOR YEAR	Credit Hours	
	Fall	Spring
Phy 311-12 .....	3	3
Phy 321-22 .....	3	3
Phy 331-32 .....	2	2
Math Elective .....	3	
Math 462-63 .....	3	3
For Lang .....	4	4
Soc Sci Elect (300 level) .....		3
	18	18

SENIOR YEAR	Credit Hours	
	Fall	Spring
Eng 300 .....	2	
Phy 412-13 .....	3	3
Phy 450 .....		3
App Elect (300-400 level) .....	12	10
	17	16

\*Mathematics 161 and/or Mathematics 162 are to be taken first if need is indicated.

CURRICULUM FOR A MAJOR IN PHYSICS (TEACHER EDUCATION)

FRESHMAN YEAR	Credit Hours	
	Fall	Spring
Eng 101-02 .....	3	3
Math 163-64 .....	4	4
Hist 201-02 .....	3	3
Chem 121-22 .....	4	4
PE or AERO .....	1	1
Phy 191 .....	1	
	16	15

SOPHOMORE YEAR	Credit Hours	
	Fall	Spring
Eng 211-12 .....	3	3
Math 263-4 .....	3	3
Phy 221-2 .....	4	4
CS 193, 291 .....	3	3
Psy 242 .....	3	
Hum Elect .....		4
	16	17

JUNIOR YEAR	Credit Hours	
	Fall	Spring
Phy Elect (300 level) .....	3	
Phy 311-12 .....	3	3
Phy 412-13 .....	3	3
Math 462-63 .....	3	3
Ed 201 .....	3	
Ed 301 .....		3
Psy 312 .....		3
Soc Sci (300 level) .....	3	3
	18	18

SENIOR YEAR	Credit Hours	
	Fall	Spring
Eng 300 .....	2	
Phy 450 .....	3	
Ed 387 .....	3	
Hea 301 or 305 .....	2	
Phil 201 .....	2	
Phy Elect (300-400 level) .....	3	
Phy 371 .....		3
Ed 491 .....		3
Ed 472 .....		9
	15	15

\*Mathematics 161 and/or Mathematics 162 are to be taken first if need is indicated.



CURRICULUM FOR A MAJOR IN MATHEMATICS

FRESHMAN YEAR	Credit Hours	
	Fall	Spring
Eng 101-02 .....	3	3
*Math 163-164 .....	4	
Hist 201-02 .....	3	3
Fr 101-03 or Ger 101-02 .....	4	4
PE or AERO .....	1	1
Math 191-92 .....	1	1
	16	12

SOPHOMORE YEAR	Credit Hours	
	Fall	Spring
Eng 211-12 .....	3	3
Math 263-4 .....	3	3
Phys 221-22 .....	4	4
CS 193, 291 .....	3	3
Hum Elect .....	2	3
PE or AERO .....	1	1
	16	17

JUNIOR YEAR	Credit Hours	
	Fall	Spring
Math 361-62 .....	3	3
Eng 300 .....		3
Phil 201 .....	2	
Math Elect (300 level).....	3	4
Biol 111-12 or Chem 112-22 .....	4	4
Appr Elect .....	4	3
Hum Elect .....	2	
	18	17

SENIOR YEAR	Credit Hours	
	Fall	Spring
Math 364 .....	3	
Math 450 .....	3	
Math Elect (300-400 level).....	3	6
Appr Elect (300-400 level) .....	8	10
	17	16

\*Mathematics 161 and/or Mathematics 162 are to be taken first if need is indicated.

CURRICULUM FOR A MAJOR IN MATHEMATICS (TEACHER EDUCATION)

FRESHMAN YEAR	Credit Hours	
	Fall	Spring
Eng 101-02 .....	3	3
*Math 163-64 .....	4	4
Hist 201-02 .....	3	3
Fr 101-02 or Ger 101-02 .....	4	4
Math 191-92 .....	1	1
PE or AERO .....	1	1
	16	16

SOPHOMORE YEAR	Credit Hours	
	Fall	Spring
Eng 211-12 .....	3	3
Math 263-4 .....	3	3
Phy 221-22 .....	4	4
Hum Elect .....	4	
EDCI 201 .....		3
CS 193, 291 .....	3	3
PE or AERO .....	1	1
	18	17

JUNIOR YEAR	Credit Hours	
	Fall	Spring
Math 361-62 .....	3	3
Math Elect (300-400 level).....	4	2
EDCI 387 .....		3
EDCI 301 .....		3
Hum Elect .....	4	
Eng 300 .....	2	
Psy 312 .....		3
Biol 111-12 or Chem 121-22 .....	4	4
	17	18

SENIOR YEAR	Credit Hours	
	Fall	Spring
Phil 201 .....	2	
Math 450 .....	3	
EDRD 491 .....		3
EDSE 465 .....	3	
EDCI 472S .....		9
Math 371 .....		3
HEA 301 or 305 .....	2	
Soc Sci Elect (300-400 level) .....	4	
Math 364 .....	3	
	17	15

\*Mathematics 161 and/04 Mathematics 162 are to be taken first if need is indicated.

COURSE DESCRIPTIONS MATHEMATICS

**MATH. 100. Arithmetic and Prealgebra. (3)** Fundamental operations on whole numbers, fractions, integers, prime numbers, mixed numbers, decimals, percentages, and ratios and proportions. This course is designed for students who score below a prescribed minimum on a Diagnostic Test. May not be counted toward any degree requirements.

**MATH 101. Elementary Algebra. (4)** Integers, mathematical expressions, linear equations, exponents, products, factoring, algebraic fractions, radical expressions, quadratic equations, graphing linear equations and parabolas. May not be counted toward any degree requirements.

**MATH 102. Geometry. (3)** Line, triangles, circles, polygons, congruent and similar triangles, parallelism, area, coordinate geometry, geometric proofs. Prerequisite: One year of high school algebra or Math 101. May not be counted toward degree requirements.

**MATH. 110. The Mathematics of Drugs and Solutions. (1)** The metric and Apothecaries' systems of weights and measures; abbreviations, symbols, conversions. Calculations involved in preparing solutions from powdered drugs and tablets, dilutions of concentrated stock solutions, dosages.

**MATH. 111. Introduction to College Math I. (4)** A review of fundamental operations in arithmetic and algebra; sets; linear and quadratic equations; systems of equations exponents; functions; graphs. Four lectures per week.

**MATH. 112. Introduction to College Math II. (3)** An extension of Math 111 with emphasis on exponential functions, logarithms, numerical trigonometry, probability and elementary statistics. Prerequisite: Math 111. Three lectures per week.

**MATH 111H-112H. Introduction to College Math I and II. (3,3)** A review of fundamental operations of algebra and arithmetic; linear and quadratic equations, trigonometry, probability and statistics. This sequence will consider the more theoretical aspects of each of the above topics. The course is intended for students enrolled in the University Honors Program. Prerequisite for Math 112H is 111H.

**MATH. 113. Basic Calculus. (4)** Slopes of lines, average rates, differentiation with applications in business, social sciences, physical and life sciences. Integration and applications, sequences and series, exponential and logarithmic functions. Prerequisite: Math 111.

**MATH. 172. Mathematics of Finance. (3)** Compound interest and discount, annuities, amortization and sinking funds, depreciation, bonds, life annuities, life insurance. Prerequisite: Math 111.

**MATH. 161. Precalculus Mathematics I. (4)** An integrated course in algebra and trigonometry designed for the mathematics, science and engineering majors whose records and/or tests performances indicate the need for the course. Four lectures per week.

**MATH. 162. Precalculus Mathematics II. (4)** Analytic geometry of two and three dimensions. Prerequisite: Mathematics 161 or satisfactory high school and test performance records. Four lectures per week.

**MATH. 191-2. Fundamentals of Mathematics I-II. (1,1)** A brief survey of selected topics, the theory of sets and propositional logic, algebra of vectors, applications of vectors, basic concepts of differential and integral calculus. One lecture per week.

**MATH 211-212. Structure of the Number System. (3,3)** Set theory, whole numbers integers. Inverses, order properties; rational numbers. Elementary number theory; rational and irrational numbers. Euclidean geometry. Must be taken in sequence. Prerequisite: 1 year high school algebra and at least sophomore standing in Elementary Education: College of Education, or consent of instructor.

**MATH. 163-164. Calculus and Analytic Geometry I, II. (4,4)** Functions, graphs, limits, derivatives and applications, the Mean Value Theorem, antidifferentiation, the definite integral and applications, transcendental functions, techniques of integration, conics and polar coordinates. Prerequisite: 2 years of high school algebra and one semester of trigonometry or Math 162. These courses should be taken in successive quarters.

**MATH. 263-264. Calculus and Analytic Geometry III-IV. (3,3)** Indeterminate forms; infinite series, vector functions, three dimensional space, partial differentiation, multiple integration and applications. Prerequisite: Math 164.

**MATH. 291-292. Introduction to Probability and Statistics I, II. (1,1)** A brief survey of discrete probability, basic statistics concepts, applications. Prerequisite for 292: Math 291. One lecture per week.

**MATH. 303. Engineering Mathematics I. (3)** Ordinary differential equation, Fourier series.



Laplace transforms with emphasis on the application to mechanical and electrical systems. Prerequisite: Math 264, Psy 222.

**MATH 311-12. Probability and Statistics I-II. (3,3)** The mathematical foundations, methods, and applications of probability theory; an introduction to some principles of statistical analysis; sampling distributions, tests of significance, decision making. Prerequisite: Math 164 or equivalent, or consent of the department.

**MATH. 313. Introduction to Numerical Analysis. (3)** Errors, interpolation, approximations, numerical quadrature, solution of ordinary differential equations. Prerequisite: Math 164.

**MATH. 331. Concepts of Modern Geometry I. (3)** Advanced plane geometry, synthetic and analytic, and its relation to Euclidean and other geometries. The classical theorems of Ceva, Menelaus, and others are treated. Prerequisite: Math 164 or equivalent.

**MATH. 332. Concepts of Modern Geometry II. (3)** Elementary geometry is reexamined from an advanced standpoint. Valid definitions are presented and proofs of theorems (intuitively known) are given. Prerequisite: Math 164 or equivalent.

**MATH 361-2. Linear Algebra. (3,3)** Theory of the operations on vector spaces; matrices, determinants, and solutions of systems of linear equations, matrix transformations, rank of systems of linear equations; selected topics from the theory of equations. Prerequisite: Math 164.

**MATH 364. Introduction to Modern Algebra. (3)** The algebra of sets. Properties and theorems on groups, rings, integral domains, fields, ideals and other mathematical systems. Prerequisite: Math 164.

**MATH 371. The Teaching of Mathematics in the Secondary School. (3)** Lectures, discussions, and reports on materials and methods used in the instruction of mathematics at the junior and senior high level. Prerequisite: Math 164; prerequisite or parallel. Field experience required.

**MATH. 450. Senior Project. (3)** A comprehensive inquiry into the nature of mathematics. Emphasis will be placed on written presentation of the subject matter. Required of all prospective graduating seniors in the department. Prerequisite: Senior standing.

**MATH 451-2. Functions of a Real Variable. (3)** Point-set topology of the real line, limits, functions, continuity, differentiation, sequences, series, convergence and integration theory. Prerequisite: Math 264.

**MATH. 453. Functions of a Complex Variable. (3)** Geometry of the complex plane, complex integrals, Cauchy's integral theorem and formula, Taylor's and Laurent's series. The calculus of residues and an introduction to conformal mapping. Prerequisite: Math 264.

**MATH. 461. Special Topics in Calculus. (3)** Infinite series, infinite products operations, elliptic integrals, Fourier series and Fourier integrals. Prerequisite: Math 263 or equivalent.

**MATH. 462-3. Differential Equations I-II. (3,3)** Solution of ordinary differential equa-

tions; applications; partial differential equations; methods of numerical analysis of nonlinear equations. Prerequisite: Math 264 or equivalent.

**MATH. 464. Partial Differential Equations. (3)** Fourier series; Fourier integrals; orthogonal functions; the vibrating string; solution by series; heat flow, Bessel functions. Prerequisite: 463.

**MATH. 472. History of Mathematics. (3)** The origin and development of mathematical ideas beginning with geometry and algebra and continuing through selected topics in modern mathematics. Prerequisite: Math 164 or consent of department.

**MATH. 473. Introduction to Mathematical Logic. (3)** Introduction to the nature of consistency and valid inference. Isomorphisms among derivation systems, truth-value structures, and English. Predicate calculus; universal and existential quantification. The logic of identity. Informal proofs. Prerequisite: Math 164 or consent of department.

**MATH. 474. The Logic of Sets and of Mathematics. (3)** A formal treatment of set theory. The relation of logic and set theory to scientific method, mathematics and statistics. Inductive versus deductive processes. Theory of definition. Multivalued logics. Prerequisite: Math 473.

**MATH. 480. (A Through I).** Special Topics in mathematics to be offered to the preference and needs of the student.

**a. Boolean Algebra. (3)** Definition of a Boolean Algebra and related theorems with proofs; the application of Boolean Algebra to the algebra of sets, logic and switching circuits.

**b. Combinatorial Analysis. (3)** The calculus of enumeration including permutations, the principle of inclusion and exclusion, Polya's Theorem. Prerequisite: Math 164.

**c. Introduction to the Theory of Numbers. (3)** Divisibility properties of integers; primes and their properties; linear congruences and congruences of higher degree; number theoretic functions; diophantine equations; quadratic reciprocity laws; unsolved classical problems in number theory.

**d. Operational Calculus. (3)** Basic operation rules of Laplace transforms through the complex-inversion theorem. Applications to solutions of initial and boundary value problems in differential equations. Prerequisite: Math 462.

**e. Introduction to Functional Analysis. (3)** Banach space, Hilbert space, linear operators. Prerequisite: Math 451.

**f. Vector Calculus. (3)** Derivative and integral of vector functions, gradient, divergence, curl, Green's Theorem, Stokes Theorem and introduction to Laplace's Equation and elementary boundary value problems. A thorough knowledge of matrices and determinants recommended. Prerequisite: Math 362.

**g. Tensor Calculus. (3)** Theory and Application of Tensors. Linear vector spaces, Riemannian geometry, analytical mechanics, calculus of variations and mechanics of continuous media. Prerequisite: Consent of department.

**h. Metric Differential Geometry. (3)** Curves and surfaces in Euclidean 3-space, developable surfaces, fundamental forms, systems of curves and surfaces, curvature, geodesics. Prerequisite: advanced standing in mathematics.

**i. Elementary Topology. (3)** Sets, functions and relations; metric spaces, general topological spaces; compactness; quotient spaces; net and filter convergence; product spaces. Prerequisite: Math 164.

**MATH. 491. Linear Programming. (3)** Matrix algebra, convexity and linear function, constraints and objective function, graphical methods, simplex method, degeneracy, decomposition theory, linear programming in FORTRAN, dual theorems, primal-dual methods, integer programming, parametric programming and applications in assignment, transportation and management problems. Prerequisite: Math 362.

**MATH. 492. Finite Markov Chains. (1)** A brief survey of the theory of Markov Chains and its applications. Prerequisite: Consent of department.

**MATH. 493. Difference Differential Equations. (3)** Linear difference differential equations, some partial difference differential equations, numerical solution to differential equations, and applications in engineering and social sciences. Prerequisite: Math 463.

## PHYSICS

**Phy 191-192. Fundamentals of Physics. (1,1)** A freshman course designed to give the beginning physics major (1) a descriptive account of the classical and modern concepts in physics; (2) a brief review of trigonometry, vector algebra and problem solving techniques.

**Phy 211-212. College Physics. (3,3)** Mechanics; Heat, Sound and Light; Electricity and Magnetism and Modern Physics. A course in which the basic principles are presented. Required of biology, pre-med, and allied health profession majors. Prerequisite: Mathematics 161. Successful completion of Physics 211 is the prerequisite for Physics 212.

**Phy 211L-212L. College Physics Laboratory. (1,1)** One two hour laboratory per week designed to be taken concurrently with Phy 211-2.

**Phy 221-222-223. General Physics. (3,3,3)** Mechanics; Heat, Sound and Light; Electricity and Magnetism; and Modern Physics. The course is intended for students with majors in engineering, mathematics, or a physical science. Prerequisite: Math 164 (or taken concurrently). These courses must be taken in sequence.

**Phy 221L-222L. General Physics Laboratory. (1,1)** One two hour laboratory per week designed to be taken concurrently with Phy 221-2.

**Phy 301. Qualitative Biophysics. (3)** A qualitative approach to introductory biophysics; skeletal muscle dynamics, assessment of bone structure by measurement of the speed of sound and bone-mineral content, hydrodynamic analysis of the cardiovascular system. Prerequisite: one year of college physics.

**Phy 311-312. Electricity and Magnetism. (3,3)** This course presents the fundamentals of theoretical electricity and magnetism. Considerable emphasis is placed upon the solution of problems. Prerequisite: Math 164, Phy 221-2 or Phy 211-2. Three lectures per week.



**Phy 314. Optics. (3)** A brief review of geometrical optics and a study of physical optics including spectroscopy. Prerequisite: Physics 211-212 or Physics 221-222; Math 164. Three lectures and one laboratory period per week.

**Phy 320. Heat and Thermodynamics. (2)** A study of the fundamentals of heat and an introduction to thermodynamics with applications to chemistry. Prerequisites: Physics 211-2 or Physics 221-222, Mathematics 164. Two lectures per week.

**Phy 321-322. Mechanics. (3,3)** Statics and dynamics of particles and rigid bodies. Lagrange's and Hamilton's equations: Fluid Statics, and vibrations. Prerequisite: Physics 211-2 or Physics 221-2; Mathematics 164. Three lectures per week.

**Phy 31-332. Electrical Measurements. (2,2)** The theory of electrical circuits is studied and discussed. The laboratory work is intended to give experience and facility in the handling of electrical measuring instruments. A comprehensive list of experiments is required, covering modern methods of measuring current, resistance, electromotive force and power, and the calibration of instruments employed, together with measurements of capacity, inductance, and ferro-magnetism. Prerequisites: Physics 221-2 or Phy 221-2; Mathematics 164. Two laboratory periods per week.

**Phy 341-342. Advanced Laboratory. (2,2)** This course is designed to permit the student to develop a variety of laboratory skills and techniques by performing experiments of an advanced nature selected from the areas of Mechanics, Heat, Sound, Light, and Modern Physics. Prerequisites: Physics 221-2; Mathematics 164. Three lectures per week.

**Phy 361. Solid State Physics. (3)** A physical interpretation of the conductive properties of metals and semi-conductor materials based on the periodic nature of the crystalline solid is presented; applications, including the transistor. Primarily for electrical engineering students with junior standing.

**Phy 371. Teaching of Physics in the Secondary Schools. (2)** Emphasis is placed on the materials and methods suitable for use in secondary schools. Techniques of caring for apparatus, tools, and materials are studied.

**Phy 401. Seminar for Modern Physics. (2)** A course designed as an elective suitable for liberal arts students as well as science and mathematics students. Selected topics in modern physics; concepts discussed from the standpoint of the effects these concepts have had on man and his environment.

**Phy 402. Modern Health Physics. (2)** An introduction to medical and health physics with descriptive emphasis on modern instrumentation, X-rays as a diagnostic tool, ultrasonics, electron-microscopy, optical and acoustical holography, laser surgery. Prerequisite: One year of college physics.

**Phy 410-411. Introduction to Quantum Mechanics. (3,3)** Introduction to fundamental principles of quantum mechanics and methods of calculation. Application to atomic, molecular

and nuclear physics. Prerequisite: Physics 221-2. Math 164.

**Phy 412-413. Modern Physics. (3)** The Classical and modern concepts of the atom and radiation are developed; introduction to molecular structure, the chemical bond, nuclear physics; fission, isotopic tracers; medical radiology; cosmic rays. Prerequisites: Physics 221-2 or Physics 221-2; Mathematics 164. Three lectures per week.

**Phy 450. Senior Project. (3)** Individual study and presentation of a special topic in physics or the teaching of physics. Required of all prospective graduating seniors in the department.

**Phy 440-460. Undergraduate Readings and Research. (3,3)** Individual study and research under faculty guidance. Prerequisite: 12 hours of upper division physics and permission of instructor.

ASTRONOMY

**Astronomy 110-20. Introductory Astronomy. (4,4)** History of astronomy, development of theories, astronomical equipment and observational techniques; Solar system—planets, sun, interplanetary matter, comets, meteors.

**Astronomy 140. Modern Astronomy. (4)** Introduction to stellar and galactic astronomy. Includes discussions of quasars, pulsars, black holes in space, and modern cosmology. Telescopic observations of prominent objects.

**Astronomy 301-02. Descriptive Astronomy. (3,3)** An introduction to modern astronomy, including the solar system and its constituents, stars and stellar systems, their structure and motions, and cosmology. Astronomical instruments and their uses will be studied.

COMPUTER SCIENCE (CS)

**CS 193. Basic Computer Programming. (3)** Introduction to some of the basic types of statements in the BASIC and FORTRAN languages. Some elementary problems from algebra, trigonometry and geometry, as well as, some business oriented problems. Prerequisite: Consent of instructor.

**CS 291. Computer Programming. (3)** An extension of CS193 using more advanced programming instructions with emphasis on problems making use of Function subprograms and subroutine subprograms. In addition to BASIC and FORTRAN, other languages such as assembler and COBOL will be studied. Applications of programming techniques to problems in mathematics, engineering, science and non-scientific areas will be discussed. Prerequisite: CS 193 or permission of instructor.

Other courses in Computer Science are listed in the Engineering section of this catalog.

GEOLOGY

Students concentrating in geology should include in their curriculum Geology 210, 317, 318, 320, 340, 410.

**Geology 101-102. (4,4) Geology 101. Physical Geology.** Materials and Structure of the Earth, Geologic Processes and Landforms.

**Geology 102. Oceanography and Historical Geology.** Shoreline erosion and deposition, marine sedimentary processes and methods of historical geology.

**Geology 210. Geological History of the Earth. (4)** Origin and evolution of continents, atmosphere, oceans and earth's inhabitants with emphasis on physical history and classical stratigraphy of North America. Prerequisite: Geology 102—3 hours and one hour lab.

**Geology 261. Geology (for engineering students). (3)** Materials and structure of the earth with emphasis on the engineering behavior of rocks.

**Geology 317. Crystallography and Methods in Mineralogy. (3)** Classical and modern X-ray Crystallography. Classification and identification of silicate and non-silicate minerals. Laboratory includes hand specimen and analytical methods of identification. Prerequisite: 102. Two lectures and 1 lab.

**Geology 318. Lithology. (4)** Elements of rock classification and properties of igneous, metamorphic and sedimentary rocks. Laboratory includes study of megascopic and microscopic properties of important rock types and introduces thin section study. Prerequisite: 317. Two lectures and two labs.

**Geology 320. Invertebrate Paleontology. (4)** Laboratory includes identification of all commonly fossilized invertebrate Phyla. Prerequisite: 102 or consent of instructor.

**Geology 330. Geology Field Trip. (4)** A three week field trip through the American West, with emphasis on observations in areas of noteworthy geological interest. Library research and a report on an area visited. Prerequisite: 210 and consent of the instructor.

**Geology 340. Structural Geology. (4)** Introductory discussion of structures such as folds, faults, joints, cleavage and primary structures. Laboratory work includes depth and thickness problems, structure sections, structure contour maps, and stereographic projections. Prerequisite: 102 or consent of instructor. Two hours and one lab.

**Geology 350. Introductory Environmental Geology. (4)** Geologic problems involving earth environments and resources, and geologic parameters associated with their control and misuse. Prerequisite: Geology 102.

**Geology 410. Sedimentology. (4)** Origin and methods of transportation and deposition of sediments; techniques of description and methods of classification of sedimentary rocks; identification of original sedimentary structures. Prerequisite: 102, 318, two hours and two labs.

**Geology 430. Geologic Mapping. (3)** Interpretation of maps and methods of geologic mapping. Prerequisite: 210, 340, 410.

**Geology 440. Optical Mineralogy and Petrology. (3)** Microscopic properties of rocks and minerals in thin section, including study with the polarizing microscope. Prerequisite: 318. Two lectures and one lab.

**Geology 450. Petroleum Geology. (4)** Origin and accumulation of petroleum and natural gas. Geological methods used in exploration. Evaluation of well logs. Prerequisite: 102, 318, 340 or consent of the instructor.



**Geology 460. Geology of Ore Deposits.** (4) Distribution, origin, mode of occurrence, methods of exploration and uses of metallic minerals. Prerequisite: Geology 102, 318, 340 or consent of instructor.

**Geology 470. Geology of Non-metallic Minerals.** (4) Origin, occurrence and uses of non-metallic minerals. Prerequisite: Geology 102, 318, or consent of the instructor.

**Geology 480. Principles of Geomorphology.** (4) Gradational processes acting at earth's surface and landforms produced. Prerequisite: 102.

## DEPARTMENT OF SOCIOLOGY

**Levi Jones, Ph.D.,  
Head**

The courses in Sociology are designed to meet the following objectives: (1) to increase the student's comprehension of human nature, society and culture and of major and social problems of the day; (2) to provide broad pre-professional education for those students interested in pursuing graduate work in such fields as guidance and counseling, law, urban and regional planning, and social work; and (3) to give a basic body of knowledge for those who may enter graduate work in specialized areas of Sociology.

The curricula in Sociology offer courses of study leading to two Bachelor of Science degrees: B.S. in Sociology and B.S. in Sociology with teacher certification in Social Studies.

Students in the curricula are required to take a minimum of one major and one minor.

The Department of Sociology participates in an interdisciplinary concentration in Urban Affairs in Cooperation with the Department of Government and Public Affairs. Courses are taught in conjunction with the Social Science Laboratory and computer facility. The Urban Affairs concentration is open to those students who elect to pursue it.

Career opportunities of students completing the Bachelor of Science degree in Sociology and not choosing to enter graduate or professional schools include employment in (1) a variety of local, state, or federal social service and community agencies—housing, juvenile court and juvenile correctional facilities, adult correctional institutions, planning agencies, mental health and drug counseling centers, youth guidance agencies, community organization, and the like—, (2) teaching sociology and other social sciences in high school, (3) management and man-

agement trainee programs for retail establishments, manufacturers, insurance companies, banks, telephone and other utility companies, (4) publishers' college sales representatives, (5) newspaper journalism, and (6) the ministry.

Requirements for graduation: (1) A student must complete a minimum of 132 semester hours of work for the bachelor's degree. (2) At least 60 of the semester hours must be in courses on the 300 and 400 level. (3) Thirty semester hours on the 300 and 400 level.

Students who minor in sociology must complete a minimum of 15 semester hours in 300 and 400 level courses in addition to the introductory course, Sociology 211.

### CURRICULUM FOR A MAJOR IN SOCIOLOGY

#### (Bachelor of Science Degree)

FRESHMAN YEAR	Credit Hours	
	Fall	Spring
ENG 101-102 .....	3	3
HIST 201-02 .....	3	3
SOC 100 .....	1	
ART 133; MUS 131; or THEA 120 (Choose 2) .....		4
MATH 111 .....	4	
PE or AERO .....	1	1
HEA 151 .....		2
SOC 211 .....	3	
Electives .....		4
	15	17

SOPHOMORE YEAR	Credit Hours	
	Fall	Spring
PSY 201-310 or 242 .....	3	3
ENG 211-12 .....	3	3
SCI 121-22 .....	3	3
SOC 330 .....	3	
PE or AERO .....	1	1
EC 211 .....	3	
Electives .....		6
	16	16

JUNIOR YEAR	Credit Hours	
	Fall	Spring
ENG 310 .....		3
SOC 300 .....	3	
SOC 360 .....	3	
SOC 451 .....		3
GPA 221-22 .....	3	3
SOC (300-400 level) .....	6	3
MINOR (300-400 level) .....	3	3
Electives (300-400) .....		3
	18	18

SENIOR YEAR	Credit Hours	
	Fall	Spring
SOC 452 .....	3	
SOC 490 .....	3	
MINOR (300-400 level) .....	6	6
Electives (300-400 level) .....	3	6
Electives (any level) .....		2
	18	14

A minimum of 132 semester hours for the Bachelor of Science degree is required.

### CURRICULUM FOR A MAJOR IN SOCIOLOGY (B.S. Degree with Certification in Social Studies)\*

FRESHMAN YEAR	Credit Hours	
	Fall	Spring
ENG 101-102 .....	3	3
HIST 201-02 .....	3	3
GEOG 171-72 .....	3	3
MATH 111; SOC 211 .....	4	3
PE or AERO .....	1	1
HLTH 151 .....		2
SOC 100 .....	1	
	15	15

SOPHOMORE YEAR	Credit Hours	
	Fall	Spring
PSY 201, 242 .....	3	3
ENG 211-12 .....	3	3
SCI 121-22 .....	3	3
SOC 330 .....		3
ART 133; MUS 131 .....	2	2
HIST 301-2 or 401-2 .....	3	3
EDCI 201 .....	3	
PE or AERO .....	1	1
	18	18

JUNIOR YEAR	Credit Hours	
	Fall	Spring
SOC 300 .....	3	
SOC 350 .....		3
SOC 360 .....	3	
SOC 451 .....		3
PSY 312 .....		3
GPA 221-22 .....	3	3
ECON 211-12 .....	3	3
EDCI 301 .....	3	
EDCI 387 .....		3
ENG 310 .....	3	
	18	18

SENIOR YEAR	Credit Hours	
	Fall	Spring
SOC (300-400 level) .....	6	
SOC 452 .....	3	
SOC 490 .....	3	
EDSE 465 .....	3	
HIST 371 .....		3
ED 491 .....		3
ED 472 .....		9
	15	15

\*If a student takes a lighter load during the sophomore or junior years, work may be completed in summer sessions between the freshman and sophomore years, sophomore and junior years, or junior and senior years. Education 472 and 491 and History 371 cannot be taken during the summer session, and they must be taken together either in the fall or the spring semester. History 371 and Education 491 are to be completed during the first nine weeks of a semester and Education 472 during the last nine weeks of the same semester. Before enrolling in these courses all other Education (Educ. 201, 301, 387, 465), Psychology (Psy. 242 and 312) and three-fourths of the Social Studies courses (Economics, Geography, History, Government and Public Affairs, Psychology and Sociology) must be completed.

A minimum of 132 semester hours for the B.S. with Certification in Social Studies is required.



URBAN AFFAIRS CONCENTRATION

A. Core Centration

GPA/UA	221—American National Government	3
SOC/GPA/UA	451 or 310—Methods Course (jointly taught)	3
GPA/UA	390—Introduction to Urban Affairs	3
SOC/UA	460—Urban Sociology	3
GPA/UA	440—Introduction to Public Administration	3
SOC/UA	305—Uses of the Computer in the Social Sciences	3

18 Semester Hrs.

B. Students will be required to select one course from each of the following discipline groupings:

<b>Psychology</b>	
PSY/UA	434 (3) Community Therapy: Social Training Program Development
PSY/UA	341 (3) Social Psychology
<b>Social Welfare</b>	
SW/UA	320 (3) Human Behavior and Social Environment
SW/UA	460 (3) Social Work with Minorities and Women
<b>Communications</b>	
SPCH/UA	210 (3) Fundamentals of Speech Communications
SPCH/UA	375 (3) Communicative Skills
SPCH/UA	448 (3) Principles of Public Relations
<b>Geography/History</b>	
GEOG/UA	382 (3) Urban Geography
GEO/UA	310 (3) Cartography
HIST	364 (3) History of Urban America

COURSE OFFERINGS  
SOCIOLOGY (SOC)

**SOC 100. Orientation. (1)** A course required of all first semester freshmen majoring in the Department of Sociology. Designed to orient the student to the University, and to acquaint him with opportunities for study and employment in sociology.

**SOC 211. Introduction to Sociology. (3)** Introduction to sociology as a scientific discipline. Subject matter includes sociological concepts, sociological processes, and social institutions. Prerequisite to all other courses in the department.

**SOC 300. Social Statistics. (3)** Introduction to elementary statistics. Emphasis on analysis and interpretation of social survey data.

**SOC 305. Using the Computer in the Social Sciences. (3)** A course designed to familiarize the student with equipment, programs, and procedures for processing and interpreting the medium and large volumes of data used in the social sciences. Students will be introduced to Basic Plus and pilot computer languages and to SPSS (Statistical Package for the Social Sciences). The course will also serve as a foundation for Social Statistics. Students preparing senior projects or doing social science research will find the course useful. The PDP 11/34 and the IBM 370/140 computer system will be used.

**SOC 310. Sex, Gender and Social Interaction. (3)** An examination of the difference between sex as a biophysical attribute of human beings and gender as a set of normatively-assigned attributes; source and interpretations of the differences between sex and gender; and the relationship between sex, gender and the way human beings participate in social roles.

**SOC 330. Social Problems. (3)** Analysis and treatment of behavioral and structural problems in society.

**SOC 340. Problems of Courtships and Marriage. (3)** A critical approach to problems of courtship, marriage, and the family with emphasis on mate selection, marital roles and adjustment, economic problems, women and the family, and parent-child relationships.

**SOC 350. Social Psychology. (3)** Analysis of the social act. Topics include socialization, symboling system, social status and social role, personality, small group analysis and research.

**SOC 355. Social Movements. (3)** Development, organization, and function of social movements, especially ideology, leadership, and organization of political, religious, and other types of social movements.

**SOC 360. The Family. (3)** Development and change in the family as a social institution are examined through the use of cross-cultural materials. The development of family expectations and roles, cultural conditioning and learning, emotional interaction, mate selection, and family unity. Attention to changes currently affecting the American family.

**SOC 370. Minority Group Problems. (3)** Examination of the problems, relationships and adjustments of racial, cultural, and ethnic minorities. Emphasis on the nature of these phenomena as they occur in the American social setting.

**SOC 375. Sociology of Sports. (3)** Focuses on social mobility, environmental adjustments, and problems of male and female athletes. Some attention to such factors as race, cultural background of various ethnic groups, and other factors involved in apparent group superiority in some sports.

**SOC 380. Industrial Sociology. (3)** The human relations of modern business and industrial organization, the interdependence of the technological and social factors and some implications for the adjustment of the individual on the job and in the community.

**SOC 385. Political Sociology. (3)** Sociological analysis of the American political system. Attention given to the concept of power, elitist-pluralist controversy, end-of-ideology debate, and related topics.

**SOC 390. Black Nationalism: A Sociological Analysis. (3)** Analysis of Fraizer's concept of the Afro-American community as a nation-within-a-nation, the evolution of national consciousness from domestic to international form, race consciousness, and Black Nationalism.

**SOC 395. Racism: A Sociological Analysis. (3)** In-depth analysis of the historical development and perpetuation of racism in the society and examination of the influences of racism on the social institutions within the Black community.

**SOC 400. Criminology. (3)** An examination of the problems of crime and criminals, the making of the criminal, the theories of crime and punishment, machinery employed in dealing with the criminal, penal and correctional institutions and programs of correction. Case studies and visits to institutions serve as aids in enriching understanding.

**SOC 410. Juvenile Delinquency. (3)** Examination of theories of juvenile delinquency, the problems, the making, the punishment, and the correction of the delinquent. Considers the machinery employed in dealing with the delinquent. Visits to the institutions will be made available.

**SOC 415. Sociology and the Future. (3)** Beginning with methodologies for studying the future, this course applies those methodologies to trends concerning population, organization, environmental resources, technology, the mass media, and the military for the purpose of developing and evaluating alternate futures.

**SOC 420. Population Problems. (3)** Growth and change in the composition and distribution of population in the world and in the United States. Basic demographic concepts, theories of population growth and decline, and population policies.

**SOC 430. Sociology of Child Development. (3)** A study of the development of the child with emphasis upon a distinct sociological approach to behavior in relation to the family, play groups, school situations, the community, the large social institutions. Designed to acquaint prospective teachers and majors in sociology with the influences of social institutions upon the child's total development.

**SOC 440. Rural Sociology. (3)** A cross-cultural examination of rural life in the past and the present, focuses on change and processes of change.

**SOC 445. The Sociology of Religion. (3)** Interrelationship of society, culture, and religion.

**SOC 451. Introduction to Social Research. (3)** Study of the theory and methods of social



research. Topics include formulating hypotheses, techniques of collecting data, such as interviews, questionnaires, the survey, the computer analysis and interpretation of research data. Prerequisites: SOC 211 and SOC 300.

**SOC 452. Senior Project Writing.** Designed to orient the student toward the application of sociological knowledge and experience systematically to a specific problem. The project writing must be in one of the three following areas:

**Option A**—A supervised content analysis involving a critical and systematic examination and survey of literature dealing with one or more social problems. The outline of the problem to be examined must be approved before initiating the analysis. Prerequisites: SOC 300 and SOC 451.

**Option B**—A supervised internship program in which students conduct social research in conjunction with local community agencies; the purpose is to provide field experience in research related to urban organizations. Prerequisites: SOC 300, 451, and 460.

**Option C**—A supervised analytical project involving the critical examination of operations and functions of two or more community service agencies, private or public, for dealing with specific and/or multiple social problems within the framework of group dynamics of (b) a survey of individual's or groups' attitudes toward a social situation or problem. Research design should be developed and approved before project is initiated. Prerequisites: SOC 300 and SOC 451.

**SOC 460. Urban Sociology.** (3) Growth of urbanism throughout the world, development of urban areas, internal structure of the city, metropolitan areas, urban fringe and suburban areas, and analysis of social institutions in urban and metropolitan areas.

**SOC 465. Complex Organizations.** (3) Structure and function of formal organizations and the interrelationships of organizational variables, such as, power, authority, influence, efficiency, hierarchy, and stability.

**SOC 470. Social Stratification.** (3) Study of social inequality, causes and consequences. Topics include class, status, power, probability, and change.

**SOC 475. Introduction to Medical Sociology.** (3) A survey of the major concerns of medical sociology and social psychiatry. Emphasis is placed on such topics as distribution of disease in society, the organization of the health professions, social change and health care, death and dying, stress and disease and social factors affecting and utilization of health services.

**SOC 480. Collective Behavior.** (3) Analysis of a wide variety of collective groupings and movements; their origin, organization, membership, leadership, and dissolution. Includes analysis of such social phenomena as audiences, publics, crowds, mobs, fads, and fashions, and mass movements such as social unrest and reform.

**SOC 490. Sociological Thought.** (3) An introductory survey of the development of the

field of sociology during the nineteenth and early twentieth centuries. Major emphasis on the intellectual traditions which gave rise to sociology as a separate discipline. Theorists include Comte, Marx, Weber, Durkheim, and others.

**SOC 491. Sociological Theory.** (3) A survey and analysis of the development of sociological theory in the twentieth century with emphasis on theory in American sociology and theory construction.

**SOC 495A, 495B, 495C, and 495D. Independent Study and Readings.** (3) Designed to allow students to work independently or in groups on topics of special interest not covered in depth in course offerings. Work may be done in a tutorial relationship with an individual faculty member or in a seminar.

## ANTHROPOLOGY (ANTH)

**ANTH 210. Human Prehistory.** (3) Introduction to the prehistory of man—findings and methods with special attention to the biological and cultural development of man up to the beginning of writing.

**ANTH 230. Introduction to Cultural Anthropology.** (3) The nature of culture and society. Concepts and theories in terms of social structure, social organization, ecology, change and the role of the individual.

**ANTH 310. Comparative Social Structure.** (3) Principles of organization of persons into kinship, political, ritual, and other groups. Analysis of rights and duties of persons according to institutional context. Prerequisite: ANTH 230.

**ANTH 330. Principles of Cultural Anthropology.** (3) Basic concepts and objectives in study of culture. Range of cultural phenomena and approaches to its study. Prerequisite: ANTH 230.

**ANTH 340. Religion of Primitive Peoples.** Religions of non-literate peoples. Place of religion in their social and cultural systems.

**ANTH 360. Archaeology of United States and Canada.** (3) Survey of prehistoric peoples north of Mexico from initial occupation to European contact. ANTH 210 and 230 recommended prerequisites.

**ANTH 380. Language and Culture.** (3) Relationship between linguistic categories and patterns of culture. Prerequisites: ANTH 230.

**ANTH 400. Special Topics.** (3) Student-or-faculty generated course. Scope of subject matter to be determined by students and instructor. Prerequisite: Permission of the instructor.

**ANTH 445. Urban Anthropology.** Survey of theoretical and methodological issues anthropologists encounter researching cross-cultural urban settlements. Focus is an anthropological perspective and urban problems and planning. Prerequisite: ANTH 230.

**ANTH 460. Method and Theory in American Archaeology.** (3) Historical development of New World Archaeology with emphasis on theory and field techniques. Prerequisites: 210 or permission of instructor.

**ANTH 498-99. Undergraduate Reading and Research in Anthropology.** (3-3) Individual study and research under faculty guidance. Prerequisites: 12 hours of 300-400 level anthropology and permission of instructor.

## DEPARTMENT OF SOCIAL WELFARE

### Benjamin C. Mason, Ph.D., Head

The basic objective of the Social Welfare Program at Tennessee State University is to prepare students for employment at the baccalaureate level in the field of social work. A second objective is to prepare students for entry into graduate social work education. The third objective is to contribute to the enrichment of general education by introducing students throughout the University to some of the problems, issues and contemporary developments in social welfare.

These objectives are consistent with the broad needs and interests of the students at Tennessee State University and are met through the curriculum offered through the Social Welfare program.

The curriculum is designed to: 1. Help students understand human behavior, the nature of social problems, and the ability to apply various treatment techniques in working with people who have problems. 2. Give students insight into the basic social work processes, policies and services including the influence of economic, political and social factors. 3. Provide an opportunity to apply theory through educationally focused field practice.

The curriculum in social welfare offers courses of study leading to the Bachelor of Science degree. Students will earn a minor in Sociology.

Requirements for graduation: (1) A student must complete a minimum of 134 semester hours. (2) At least 60 of the semester hours must be in courses on the 300 and 400 level. (3) A minimum of 40 semester hours in Social Welfare content courses.

To fulfill the need for more exposure in social welfare agencies, all students will be required to have a participatory obser-



vation experience prior to field placement. During the sophomore year all social welfare majors will observe and participate in five social welfare agencies for a minimum of 30 clock hours. In the junior year, students will complete two written agency profiles. Students participating in the Department's regular Volunteer program may use that experience in lieu of the observation and participation. Both requirements must be met prior to being admitted to field experience.

A student must spend a minimum of 375 clock hours (one semester) in field experience in selected social agencies. The purpose of this experience will provide the student with an opportunity to apply theory to actual practice under supervision and guidance of a qualified practitioner. He will be evaluated on the basis of his growth and development.

A student must have a cumulative average of at least 2.00 and must have earned the grade of "C" in Social Welfare 320, 330, 340, 350, 360, 380 and 400, before being admitted to Field Experience.

Courses in the major field in which a student receives the grade of "D" must be repeated.

Students who wish to minor in Social Welfare must complete a minimum of 18 semester hours including the following: Social Welfare 320, 330, 340, 350, 360 and two electives.

COURSES REQUIRED  
OF ALL MAJORS

Social Welfare	40 Semester Hours
100	Orientation (1)
320	Human Behavior & Social Environment (3)
330	Introduction to Social Welfare (3)
340	Social Policy (2)
350	Interventive Methods (3)
350L	Interventive Methods Lab (1)
360	Interventive Methods-Community-Organization (3)
380	Social Welfare Research (3)
400	Social Work Intervention in Health (3)
410	Field Experience (12)
420	Field Experience Seminar (3)
450	Analytical Review Literature (3)
490	Senior Seminar (1)

The Social Welfare Curriculum offers students three options: (1) The generalist curriculum, (2) The generalist curriculum with a concentration in child welfare, (3) The general curriculum with a concentration in health care and aging, and (4) The general curriculum with a concentration in gerontology.

GENERALIST CURRICULUM FOR  
MAJOR IN SOCIAL WELFARE

FRESHMAN YEAR COURSES		
SEMESTER HOURS CREDIT		
English 101-102	3	3
History 201-202	3	3
Math 111-112	4	3
Sociology 211	3	
Art 133		2
Speech 220		3
Social Welfare 100	1	
Physical Education 11-12		
Air Science 151-152	1	1
Government and Public Affairs		3
	15	18

SOPHOMORE YEAR COURSES		
SEMESTER HOURS CREDIT		
English 211-212	3	3
Biophysics 121-122	3	3
Social Welfare 320-330	2	3
Sociology 350-360	3	3
Social Welfare 340		3
Psychology 201		3
Physical Education or		
Air Science 251-252	1	1
Philosophy 323	2	
Government and		
Public Affairs 381	3	
	17	19

JUNIOR YEAR COURSES		
SEMESTER HOURS CREDIT		
Economics 211-212	3	3
Psychology 321	3	
Sociology 300-410	3	3
Social Welfare 350-360	4	3
Social Welfare 400		3
Social Welfare 380		3
English 310	2	
Elective		3
	15	18

SENIOR YEAR COURSES		
SEMESTER HOURS CREDIT		
Sociology 460	3	
Social Welfare 450	3	
Electives	6	
Social Welfare Elective	6	
Social Welfare 410		12
Social Welfare 420		3
Social Welfare 490		1
	18	16

GENERALIST/CONCENTRATION IN  
CHILD WELFARE

FRESHMAN YEAR COURSES		
SEMESTER HOURS CREDIT		
English 101-102	3	3
History 201-202	3	3
Mathematics 111-112	4	3
Sociology 211	3	
Physical Education or		
Air Science	1	1
Speech 220		3
Art 133		2
Social Welfare 100	1	
Government and		
Public Affairs 221		3
	15	18

SOPHOMORE YEAR COURSES		
SEMESTER HOURS CREDIT		
English211-212	3	3
Biophysics 121-122	3	3
Psychology 201	3	3
Social Welfare 320-330	2	3
Child Development and		
Family Relations 201	3	
Physical Education or		
Air Science 251-252	1	1
Philosophy 323	2	
Social Welfare 340		2
Sociology 360		3
Government and		
Public Affairs 381	3	
	17	15

JUNIOR YEAR COURSES		
SEMESTER HOURS CREDIT		
Economics 211-212	3	3
Psychology 321	3	
Sociology 300-410	3	3
Social Welfare 350-360	4	3
Child Development and		
Family Relations 351		3
Social Welfare 380		3
English 310	2	
Social Welfare 400-440	3	3
	18	18

SENIOR YEAR COURSES		
SEMESTER HOURS CREDIT		
Sociology 410	3	
Social Welfare 450	3	
Social Welfare 444	3	
Social Welfare 442	3	
Sociology 460	3	
Social Welfare 410		12
Social Welfare 420		3
Social Welfare 490		1
	15	16

GENERALIST/CONCENTRATION IN  
HEALTH CARE

FRESHMAN YEAR COURSES		
SEMESTER HOURS CREDIT		
English 101-102	3	3
History 201-202	3	3
Mathematics 111-112	4	3
Sociology 211	3	
Physical Education or		
Air Science	1	1
Speech 220		3
Art 133		1
Social Welfare 100	1	
Government and		
Public Affairs 221		3
	15	17

SOPHOMORE YEAR COURSES		
SEMESTER HOURS CREDIT		
English 211-212	3	3
Biophysics 121-122	3	3
Psychology 201	3	
Social Welfare 320-330	1	2
Social Welfare 340		2
Health Care		
Administration 201	3	
Psychology 201		3
Government and		
Public Affairs 381	3	
Philosophy 323		2
Physical Education or		
Air Science	1	1
	16	16



## JUNIOR YEAR COURSES

	SEMESTER	HOURS	CREDIT
Economics 211-212.....	3		3
English 310.....	2		
Psychology 321.....	3		
Sociology 300.....	3		
Social Welfare 380.....			3
Social Welfare 350-360.....	4		3
Social Welfare 400.....			3
Sociology 410.....	3		
Health Care			
Administration 332.....			3
	18		15

## SENIOR YEAR COURSES

	SEMESTER	HOURS	CREDIT
Sociology 460.....	3		
Social Welfare 450.....	3		
Social Welfare 410.....			12
Social Welfare 420.....			3
Social Welfare 490.....			1
Social Welfare 401.....	3		
Social Welfare 402.....	3		
Social Welfare 470.....	3		
Social Welfare Elective.....	3		
	18		16

## GENERALIST/CONCENTRATION IN GERONTOLOGY

The Gerontology curriculum is designed to: (1) increase student understanding of the aging process and other adults; (2) prepare students for work with and in behalf of older people; and (3) provide a basic body of knowledge to those who wish to pursue graduate study in gerontology.

Students who minor in gerontology must complete a minimum of 15 semester hours beyond the introductory course. See Social Welfare Department Head for concentration requirements.

## COURSE DESCRIPTIONS

**SW 100. Orientation. (1)** A course required of all freshmen in the Department of Social Welfare. Designed to the University, and to acquaint him with opportunities for study and employment in the various areas of Social Work.

**SW 320. Human Behavior and Social Environment. (2)** Analyzes the professional process and shows how the psychological and behavioral concepts drawn from the theories can be used by those preparing for the helping profession. It emphasizes understanding the functioning of human beings as it relates to their social environment.

**SW 330. Introduction to Social Welfare. (3)** This course is designed to give students a historical and current overview of the social welfare system and the field of social work. It proposes to examine basic social work concepts, the social welfare structure and services within the system. Prerequisite: 320.

**SW 340. Social Policy. (2)** This course is designed to examine the interrelationships of history, politics, philosophy, sociology, and economics, and their influence in the development of the social welfare services. Prerequisites: 320 and 330.

**SW 350. Intervention Methods. (3)** Intervention methods is an overview of social casework and groupwork as a method and process emphasizing fundamental concepts, values and principles. It is geared toward developing a conceptual framework for casework and groupwork practice based on problem-person-situation perspective which has problem-solving, growth-promoting, therapeutic, and educational dimensions. Interviewing skills and techniques will be developed through a laboratory experience. Prerequisites: 320, 330, and 340.

**SW 350L. Intervention Methods Laboratory (Casework-Group Work). (1)** This course is designed to provide students with a view of what is involved in problem-solving situations at the beginning level of social work practice through simulated laboratory activities, i.e. role-playing, use of tape recorder, film, dictaphone, etc. Major emphasis is on developing interviewing, recording, and diagnostic skills and techniques in the casework-group work situations. The basic objective is to develop an awareness and familiarize students with the situations. The basic objective is to develop an awareness and familiarize students with the integration of theory and practice. This course is to be taken concurrently with SW 350.

**SW 360. Intervention Methods-Community Organization. (3)** A course designed to show how the community organizer mobilizes individuals to work together to solve community problems, set priorities, assess community resources, and develop strategies for effecting change to meet community needs. An examination will be made of various techniques utilized by organizers to reach different goals. Prerequisites: 320, 330, 340, and 350.

**SW 380. Social Welfare Research. (3)** This introductory research course allows social welfare students to gain a theoretical and practical knowledge of the tools of the social welfare research methodology. It is oriented toward teaching the principles of conceptualization, research design, and research proposal writing. In this context students also discover a number of methods and techniques which are available for the implementation of sound research. They are encouraged to develop research proposals centered around realistically conceived, practical problems. Prerequisites: 320-330, 340, 350, 360, Soc. 300.

**SW 400. Social Work Intervention in Health. (3)** This course is designed to acquaint the student with the symptoms, etiology, physical and emotional aspects of acute and chronic diseases, illness and disabilities with the development of comprehensive medicine involving the whole person in his milieu. Emphasis will be placed on acquiring knowledge regarding social aspects of illness, utilization of community resources for the continuation and preventative methods. One hour per week will be devoted to participatory-observation at a health related agency. Prerequisites: 320-330, 340, and 350.

**SW 401. Disability and Rehabilitation: Social Work Intervention. (3)** This course is designed to acquaint students with the organization, legislative provisions and rehabilitation procedures for physically and mentally handicapped adults. Consideration will be given to causes, incidence and nature of various hand-

icaps, diagnosis, treatment, education, training, placement and follow-up. Prerequisites: 320, 330, 340, 350, 360, and 400.

**SW 402. Mental Health: Clinical Intervention and Services. (3)** This course will provide an overview of current planning and service activities. Major issues and problems in the mental health field will be examined. Beginning skills applicable to the mental health fields will be emphasized. Prerequisites: 320, 330, 340, 350, 360, and 400.

**SW 410. Field Experience. (12)** The purpose of field experience is to provide the student with the opportunity to apply and integrate academic content and to develop skills that meet the requirements for beginning professional Social Work practice. Supervision in the field will be provided by a qualified practitioner committed to undergraduate Social Welfare Education. Social Welfare Majors at Tennessee State University will be required to spend 450 clock hours in an educational oriented field experience (one semester). Seniors are admitted upon recommendation of their major advisor.

**SW 420. Field Experience Seminar. (3)** Gives students in field experience an opportunity to discuss and share agency experiences. Discussion in the Seminar moves from the level of personal experience to the level of analysis, generalization and abstraction. Taken concurrently with 410.

**SW 430. Community Problems. (2)** This course is designed to give individual and group study or research on problems which contribute to physical, socio-economic and political breakdown within the community. Prerequisites: 320, 330, 340, 350, 360.

**SW 440. Case Work Services for Children and Adolescents. (3)** This course will provide general knowledge of the basic concepts and principles of casework theory and practice as a method of helping children and adolescents with their social problems. It will acquaint students with the social agencies and the social welfare system and their roles in providing services to children, youth. The course will also increase the student's understanding of the adolescent peer group, family relationships, emotional and physical development and role. Prerequisite: ECED 201, 351; S.W. 320, 330, 340, 350, and 360.

**SW 442. Methods of Treatment for Children/Youth. (3)** The course is designed to focus on the social treatment of children and youth with a comprehensive coverage of roles and functioning of the social worker in bringing about individual change. Emphasis will be placed on treatment goals and purposes, techniques of intervention and the utilization of appropriate intervention in the social environment. Prerequisites: ECED 201, 351; S.W. 320, 330, 340, 350, and 440.

**SW 444. Family Dynamics: Diagnosis and Treatment. (3)** This course is designed to focus on the family as a dynamic, interacting system interrelated with other systems. It identifies methods generally employed in evaluating and treating the family unit. Selected theories will be applied to a variety of family types and will demonstrate the implementation of these theories in practice. Prerequisites: ECED 201, 351; S.W. 320, 330, 340, 350, 360, and 440.



**SW 446. Intervention in Child Abuse and Neglect.** This course is designed to identify behaviors common to abusive and neglectful parent(s). Specific emphasis is placed on the development of interventive skills for working with the families. Knowledge of the court process in child abuse and neglect will be one of the foci.

**SW 448. Child Rearing Practices in Black Families.** This course will examine the biological, sociological and cultural aspects of black families with emphasis on attitude and behavior patterns of child care. It will examine the social and environmental system's impact on the black family functioning with respect to adequacy of child rearing practices.

**SW 450. Analytical Review of Social Welfare Literature.** (3) This course is designed to assist the student in developing more adequate knowledge of social work and social science literature and to further develop skills in reading, writing and reporting in critical and analytical methods. Prerequisites: 320, 330, 350, 360, and 380.

**SW 460. Ethnic and Minority Concern in Social Work.** (2) The practice of social work with ethnic minorities will be the focus of this course. Political, economic and social issues will be examined as well as social policy and social welfare services.

**SW 470. Social Gerontology.** (3) A course designed to examine the aging process, and its impact upon the individual, the family, and society. Emphasis is placed on the physical, psychological, and sociological aspects of aging. An interdisciplinary approach will be used in dealing with these aspects of aging. An interdisciplinary approach will be used in dealing with these aspects to enhance and enrich the understanding of the life process. Prerequisites: 320, 330, 340, and 400.

**Sw 480H. Honors Social Welfare.** (93) An opportunity for students, through seminar and field trip experiences, to examine more analytically current social problems such as health, income maintenance, social problems, such as health, income maintenance, social relationships etc., that are related to the social work profession and the social welfare system. Students will independently study a specific problem area of interest and are required to submit a senior essay. Limited to students with 3.0 average. Prerequisites: 320, 330, 340, 350, and 360.

**SW 490. Senior Seminar.** (1) This course is designed to: (1) initiate areas of interest through discussion; (2) emphasize new trends and contributions to the field; and (3) to familiarize students with the Civil Service Merit Examinations and other techniques for gaining employment. Offered to second semester seniors.

\*See Gerontology 2100.

Students in the Health Care & Gerontology Concentration may elect any of the following courses offered through the Center on Aging.

**Gerontology 472. Psychosocial Care of the Aged.** (3) An analysis of the psychosocial needs of older adults, whether residing in an institution or in the community. Emphasis will be placed on physical, psychological, and so-

cial factors related to health care for older people. Institutional care and alternatives to institutional care will also be considered.

**Gerontology 474. Social Psychology of the Aging.** (3) Consideration of attitudinal and behavioral continuity and change across the life span with primary emphasis on continuity and change in old age. Attention on sociopsychological theories of aging, age norms, age stereo types, and adult socialization.

**Gerontology 476. Environmental Aspects of Aging.** (3) A consideration of special and perceptual problems facing most older adults. Topics for consideration include sensory deprivation, privacy, personal lifespaces and age-mix versus age-homogeneous environment.

#### CAREER OPPORTUNITIES

Career opportunities include employment at entry level social work positions in public and private agencies including Departments of:

- Human Services
- Public Health
- Mental Health
- Mental Retardation
- Corrections
- Social Security
- Social Services in Hospitals
- Community Health Centers
- Family and Children Services
- Public and Private Nursing Homes
- Home for the Aged
- Day Care Centers
- Planned Parenthood Centers
- Senior Citizens Centers

#### Gerontology

**Gerontology 210. (see also Social Welfare 470) Introduction to Gerontology.** (3) A course designed to examine the aging process and its impact upon the individual, the family and society. Emphasis is placed on physical, psychological and sociological aspects of aging. An interdisciplinary approach will be used in dealing with these aspects to enhance and enrich the understanding of the life process. The role and function of the Gerontology specialist will also be examined.

**Gerontology 400. Special Topics.** (3) Student or faculty generated course. Scope of subject matter to be determined by students and instructor. Prerequisite: Permission of instructor.

**Gerontology 411. Field Experience.** (3) Supervised experience in the delivery of services to older adults in a community setting. May be repeated up to a maximum of 6 hours. Prerequisite: Permission of instructor and nine hours of gerontology.

**Gerontology 472. Psychosocial Care of the Aged.** (3) An analysis of the psychosocial needs of older adults, whether residing in an institution or in the community. Emphasis will be placed on physical, psychological, and social factors related to health care for older people. Institutional care and alternatives to institutional care will also be considered.

**Gerontology 474. Social Psychology of the Aging.** (3) Consideration of attitudinal and behavioral continuity and change across the life span with primary emphasis on continuity and change in old age. Attention on sociopsychological theories of aging, age norms, age stereo types, and adult socialization. Prerequisite: Gerontology 472.

**Gerontology 476. Environmental Aspects of Aging.** (3) A consideration of special and perceptual problems facing more older adults. Topics for consideration include sensory deprivation, privacy, personal life-space and age-mix versus age-homogeneous environments.

**Gerontology 483. Sociology of Aging.** (3) Investigation of the aged as a social minority and subculture in society; role changes in middle and old age; significance of increase in the proportion of the aged in terms of employment, welfare, retirement and political power. Prerequisite: Gerontology 210.

**Gerontology 494-495. Readings and Research.** (3-3) Independent study and research under faculty guidance. Prerequisite: 12 hours of upper division gerontology.





# THE SCHOOL OF BUSINESS

**John T. Masten, Ph.D., Dean**

The programs of the School of Business are designed to prepare students to perform competently in the business world and to cope with the complex problems of business organizations. The specific program goals are:

1. To provide students with an understanding of the intricacies in business.
2. To provide training in modern business principles.
3. To provide students with a sound foundation for successful business careers.
4. To provide students with a knowledge and understanding of the changing developing character of our economy.
5. To educate students for the teaching of business subjects on the secondary and collegiate levels.

## Public Service

Professional development programs are offered to people within the community, region and state. Entrepreneurs and business organizations in small and large enterprise environments, private, commercial and industrial employment areas, as well as public employment organizations, are served by the School through its faculty involvement.

## Organization

The School of Business is organized into four departments: Accounting, Business Administration, Economics and Finance, and Business Education and Office Management. Bachelor of Business Administration degrees are offered in Accounting, Business Administration, Business Education, Economics and Finance, and Office Management. In Addition, an Associate of Science Degree program is available for students who wish to prepare for a career as an executive secretary or a legal secretary with paralegal responsibilities.

## Student Services

When students are admitted to the School, each student is assigned to a faculty member who serves as the student's major advisor until completion of the student's degree objective. A full time

counselor is also available. A variety of experimental activities such as cooperative education, internship, and career seminars are provided to guide the students toward careers in which they can perform successfully.

## Student Organizations

The following business student organizations are available to business students: Delta Mu Delta National Honorary Society in Business Administration; Pi Omega Pi National Business Teacher Education Honor Society; Phi Gamma Nu National Professional Society for Women in Business; Phi Beta Lambda National Business Fraternity; The National Collegiate Association for Secretaries; National Student Business League; The American Society for Personnel Administration; and The TSU Marketing Group.

## Scholarships

Scholarships are available for students who achieve high academic standing. Some are sponsored by business and industry; such as, the American Institute of Certified Public Accountants and Honeywell, Incorporated. The Lewis Ross Holland Scholarship is awarded annually to a junior student who has outstanding scholarship and leadership records.

## BACHELOR OF BUSINESS ADMINISTRATION

### Academic Regulations

These regulations are in addition to those given elsewhere in this catalog under the heading of Academic Regulations.

### Admission to The School of Business Undergraduate Programs

Applicants seeking admission to an undergraduate program in the School of Business must meet the following stipulations:

1. Satisfy the general admission requirements to the University as described in the Tennessee State University catalog in force at the time the application is filed, plus the sophomore business

core requirements of Principles of Accounting (6 hrs), Principles of Economics (6 hrs), Computer Science (3 hrs), and Statistics (6 hrs).

2. Have completed, at the time of application at least 75% of the "general education requirements" as specified by the School of Business. These courses may be taken at the University or transferred in from other institutions that meet the standards of recognized collegiate schools of business. However, all of the "general education requirements" must be completed before the student's application is finally approved. Students completing one or more of the "general education requirements" six years prior to applying for admission shall be required to demonstrate proficiency in the subject area in question. Remedial courses, proficiency examinations, and the CLEP examinations are validating techniques that may be available.

Transfer students from institutions not accredited by the regional accrediting agency, and from community colleges, may be required to validate proficiency in subject areas.

3. Have achieved a cumulative grade point average (GPA) of 2.00 on a 4.00 grading scale, as computed by the Office of Admissions and Records at Tennessee State University, at the time the application is approved.
4. File an "Application for Admission to the School of Business" and submit an up-dated transcript(s) of all course work completed.

### Credit Transferred from Other Institutions

- A. The specific credit for work done at other institutions which will apply toward the degrees of the School of Business is determined by the Dean of the School through the Office of Undergraduate Studies of the School. The amount of such transfer credit shall not in any case exceed that allowed by the Dean of Admissions of the University. Allowance of transfer credit by the Dean of Admissions does not mean necessarily that all of such credit will be accepted toward a degree in the School of Business. The amount of transfer credit that may be applied toward a degree in the School of Business will be indicated and controlled by an evaluation of such transfer credits prepared through the Office of Undergraduate Studies.
- B. The School of Business reserves the right to test the proficiency of any student in course work transferred from other colleges or universities and the



- right to disallow transfer credit in such course work in cases in which the student cannot demonstrate acceptable proficiency.
- C. A Student who has once enrolled in the School of Business must obtain prior written approval of the Department Head to take subsequent course work for credit with any other institution if the student's intention is to apply such work toward a degree in the School of Business. Failure to obtain required prior approval may prevent the acceptance of such credits by this school.
- D. Course credit transferred from junior colleges shall apply only in the freshman-sophomore years of the degree program.
- E. Any deviations from catalog requirements are unauthorized except by written petition filed through the Office of Undergraduate Studies of the School of Business and properly approved by the appropriate department.

Credit Hours Required for Graduation

Credit hours required for the Bachelor of Business Administration degree totals 133 semester hours. A detailed program is found in a subsequent section.

Standards of Performance

- A. Business students must earn a minimum grade of "C" in ALL major courses and not more than two D's in other core and business courses.
- B. Students are not permitted to register for upper-division courses until they have passed all courses in the freshman and sophomore years of the curriculum.
- C. Students who do not display a proper proficiency in English and mathematics may be required to complete such additional courses as are necessary to correct the deficiency. Courses required and completed under this provision may be **with** or **without** academic credit, and the School Dean may apply this provision without regard to prior course credits in these disciplines.

Requirements for the Degree

The Academic program for the BBA degree is outlined, year by year, below. Students desiring an exception from catalog requirements must file written petitions for such deviations through the School of Business. All deviations are unauthorized

except by a petition properly approved by the Dean of the School of Business.

The major part of the program for the freshman and sophomore years consists of courses of the School of Arts and Sciences. The objective is to provide a sound foundation in the humanities, natural and behavioral sciences, and mathematics before studies in the professional areas are undertaken. General education requirements are the same for all majors except those in Business Education. Students intending to major in Business Education should contact an adviser in the Business Education Department.

Specific School Graduation Requirements.

1. Satisfy all degree requirements of the University and the School of Business as specified in the University catalog in force at the time of entrance.
2. Earn a minimum grade of "C" in all major courses and not more than two D's in other core and business courses.
3. Take the GMAT and the Business Achievement Test prior to graduation.
4. Complete the final 30 semester hours of course work in residence at the University.

REQUIREMENTS FOR THE DEGREE BACHELOR OF BUSINESS ADMINISTRATION (BBA)

To satisfy the requirements for a Bachelor's Degree in Business, the student must complete the following:

General Requirements	Semester Hours
English 101-102, Freshman English <sup>1</sup>	6
American History 201-202	6
Science 121-122, Bio-physical Science <sup>2</sup>	6
Math 111, College Algebra <sup>3</sup>	4
Math 113, Basic Calculus	4
Economics Principles	6
English Literature 211-212	6
Humanities <sup>4</sup>	4
Computer Science MG 215	3
Social Science Elective <sup>5</sup>	3
Non-Business Electives (See selected Curriculum)	15
PE/ROTC/BAND/Health <sup>6</sup>	4
	67

Business Core Requirements

Tool Areas: Accounting Principles (211-212)	6
Business Communications (BE 315)	3
Legal Environment (BL 300)	3
Quantitative Methods (QM 201-202)	6
Information Systems (MG 323)	3
Functional Areas: Finance (FN 330)	3
Production & Operations Management I (MG 302)	3
Basic Marketing (MK 301)	3
General Areas: MGT Organization Theory & Behavior (MG 301)	3
Business Policy (MG 450)	3

Business Electives Requirements....6

Major Requirements	24
Total Required Sem. Hrs.	133

1. Students deficient in English composition take ENG 099.
2. Students may substitute a Natural Science sequence in Astronomy; Biology, Chemistry, Geology or Physics.
3. Students with no high school algebra take Math 100 and 101; students with one year take Math 101 before taking 111-113; transfer students must have the course content of Math 111 as described in the catalog.
4. Humanities includes Art 133, Music 131, Thea 120, Philosophy 201, Religious Studies—Old Testament 211, New Testament 212.
5. Social Science elective includes Sociology, Social Welfare, American Government and Political Science, Geography, or History.
6. Persons 25 years of age and older may waive this requirement. No substitution required.

DEPARTMENT OF ACCOUNTING AND BUSINESS LAW

Charles Rolen, Ph.D., Head

The curriculum in accounting is designed to provide students with general education requirements; core requirements in the various disciplines of business; and specialized and professional courses in the fields of general business, government, private accounting, and public accounting. Because of the scope of accounting and its breadth of application, majors may find



opportunities in various agencies of local, state, and federal government; public and private accounting; teaching; tax and corporate law; and positions of management in industry. Students graduating with a major in accounting automatically have a minor in general business and have completed the ACADEMIC requirements to sit for several professional examinations including: Certified Public Accountant (CPA) Certificate in Management Accounting (CMA), Public Accountant (PA), and Certified Internal Auditor (CIA).

FRESHMAN YEAR	Credit Hours	
	Fall	Spring
ENG 101-102 <sup>1</sup> .....	3	3
MATH 111-113 <sup>3</sup> .....	4	4
SCIENCE 121-122 <sup>2</sup> .....	3	3
HISTORY 201-202 .....	3	3
PE/AERO/BAND/HEALTH <sup>6</sup> .....	1	1
Non-Business Electives (PSY 201 & SPCH 230 Recommended) .....	3	3
	17	17

SOPHOMORE YEAR	Credit Hours	
	Fall	Spring
AC 211-212 .....	3	3
MG 215 .....		3
ED 211-212 .....	3	3
ENG 211-212 .....	3	3
HUMANITIES <sup>4</sup> .....	2	2
PE/AERO/BAND/HEALTH <sup>6</sup> .....	1	1
QM 201-202 .....	3	3
SOC SCI ELECT <sup>5</sup> .....	3	
	18	18

JUNIOR YEAR	Credit Hours	
	Fall	Spring
BE 315 .....	3	
FN 330 .....		3
MG 313 .....	3	
MG 301 .....	3	
MK 301 .....	3	
MG 302 .....		3
AC 311-312 .....	3	3
AC 314 .....		3
NON-BUSINESS ELECTIVES .....	3	3
	18	15

SENIOR YEAR	Credit Hours	
	Fall	Spring
AC 413 .....	3	
AC 420 .....		3
AC 411 .....	3	
AC ELECT .....		3
BL 300 .....	3	
BL 323 or 324 .....		3
BUS ELECT (UPPER DIV) .....	3	3
MG 450 .....	3	
NON-BUSINESS ELECTIVES .....		3
	15	15

1. Students deficient in English composition take ENG 099.
2. Students may substitute a Natural Science sequence in Astronomy; Biology; Chemistry; Geology or Physics.
3. Students with no high school algebra take Math 100 and Math 101; students with one year take Math 101 before taking Math 111-113; transfer students must have the course content of Math 111 as described in the catalog.

4. Humanities includes Art 133; Music 131; Thea 120; Philosophy 201; Religious Studies—Old Testament 211 and New Testament 212.
5. Social Science Elective includes Sociology, Social Welfare, American Government and Political Science, Geography, or History.
6. Persons 25 years of age and older may waive this requirement. No substitution required.

## DEPARTMENT OF BUSINESS ADMINISTRATION

### John Reynolds, Ph. D., Head

The Department of Business Administration offers concentrations in (1) General Business Administration (2) Management, (3) Marketing, and (4) Real Estate and Urban Development. Students concentrating in an area of Business Administration must complete, in addition to the core and general requirements of the School of Business, the courses listed under the chosen concentration.

### GENERAL BUSINESS ADMINISTRATION

This concentration is designed for students who prefer to acquire a broad under-graduate training in business, rather than specialize in a specific area.

The student can choose 12 hours from any functional area or concentration in business. With prior approval of a business advisor, the student can elect a maximum of two non-business courses related to a concentration:

FRESHMAN YEAR	Credit Hours	
	Fall	Spring
ENG 101-102 <sup>1</sup> .....	3	3
MATH 111-113 <sup>3</sup> .....	4	4
SCIENCE 121-122 <sup>2</sup> .....	3	3
HISTORY 201-202 .....	3	3
PE/AERO/BAND/HEALTH <sup>6</sup> .....	1	1
Non-Business Electives (PSY 201 & SPCH 230 Recommended) .....	3	3
	17	17

SOPHOMORE YEAR	Credit Hours	
	Fall	Spring
AC 211-212 .....	3	3
MG 215 .....		3
EC 211-212 .....	3	3
ENG LIT (ENG 211-212) .....	3	3
HUMANITIES <sup>4</sup> .....	2	2
PE/AERO/BAND/HEALTH <sup>6</sup> .....	1	1
QM 201-202 .....	3	3
SOC SCI ELECT .....	3	
	18	18

JUNIOR YEAR	Credit Hours	
	Fall	Spring
BE 315 .....	3	
FN 330 .....		3
MG 323 .....	3	
MG 301 .....	3	
MK 301 .....	3	
MG 302 .....		3
MK 302 .....		3
ECON or FINANCE ELECT....		3
ACCOUNTING ELECTIVE .....	3	
NON BUSINESS ELECTIVES .....	3	3
	18	15

SENIOR YEAR	Credit Hours	
	Fall	Spring
BL 300 .....	3	
MG 450 .....	3	
BUSINESS ELECTIVES:		
UPPER DIVISION .....	9	12
NON BUSINESS ELECTIVES .....		3
	15	15

<sup>1</sup>Students deficient in English Composition take ENG 099

<sup>2</sup>Students may substitute a Natural Science sequence in Astronomy; Biology; Chemistry; Geology or Physics.

<sup>3</sup>Students with no high school algebra take Math 100 and Math 101; students with one year take Math 101 before taking Math 111-113; transfer students must have the course content of Math 111 as described in the catalog.

<sup>4</sup>Humanities includes Art 133; Music 131; Thea 120; Philosophy 201; Religious Studies—Old Testament 211 and New Testament 212.

<sup>5</sup>Social Science Elective includes Sociology, Social Welfare, American Government and Political Science, Geography or History.

<sup>6</sup>Persons 25 years of age and older may waive this requirement. No substitution required.

### BUSINESS ADMINISTRATION MAJORS: MANAGEMENT CONCENTRATION

The Management program provides students with the opportunity for professional preparation applicable to the management of private and public sector organizations. Examples of employment areas are: administrative management, personnel administration, industrial relations, production management, and other assignments in small, medium, and large business, as well as, government agencies, foundations, hospitals, and other service organizations.

FRESHMAN YEAR	Credit Hours	
	Fall	Spring
ENG 101-102 <sup>1</sup> .....	3	3
MATH 111-113 <sup>3</sup> .....	4	4
SCIENCE 121-122 <sup>2</sup> .....	3	3
HISTORY 201-202 .....	3	3
PE/AERO/BAND/HEALTH <sup>6</sup> .....	1	1
Non-Business Electives (PSY 201 & SPCH 230 Recommended) .....	3	3
	17	17



SOPHOMORE YEAR	Credit Hours	
	Fall	Spring
AC 211-212.....	3	3
MG 215 .....		3
EC 211-212.....	3	3
ENG LIT (ENG 211-212) .....	3	3
PE/AERO/BAND/HEALTH <sup>6</sup> .....	1	1
HUMANITIES <sup>4</sup> .....	2	2
QUANT METHOD (QM 201-202) .....	3	3
SOC SCI ELECT <sup>5</sup> .....	3	
	18	18

JUNIOR YEAR	Credit Hours	
	Fall	Spring
BE 315 .....		3
FN 330 .....	3	
MG 323 .....	3	
MG 301 .....	3	
MK 301 .....	3	
MG 302 .....		3
MK 302 .....		3
ECON or FINANCE ELECT.....		3
ACCOUNTING ELECTIVE .....	3	
NON BUSINESS ELECTIVES .....	3	3
	18	15

SENIOR YEAR	Credit Hours	
	Fall	Spring
BL 300 .....	3	
MG 450 .....	3	
MG 404 or MG 405.....	3	
MANAGEMENT ELECTIVE .....	3	9
BUSINESS ELECTIVES.....	3	3
NON-BUSINESS ELECTIVE .....		3
	15	15

<sup>1</sup>Students deficient in English Composition take ENG 099.  
<sup>2</sup>Students may substitute a Natural Science sequence in Astronomy; Biology; Chemistry; Geology or Physics.  
<sup>3</sup>Students with no high school algebra take Math 100 and Math 101; students with one year take Math 101 before taking Math 111-113; transfer students must have the course content of Math 111 as described in the catalog.  
<sup>4</sup>Humanities includes Art 133; Music 131; Thea 120; Philosophy 201; Religious Studies—Old Testament 211 and New Testament 212.  
<sup>5</sup>Social Science Elective includes Sociology, Social Welfare, American Government and Political Science, Geography or History.  
<sup>6</sup>Persons 25 years of age and older may waive this requirement. No substitution required.

**BUSINESS ADMINISTRATION  
MAJORS: MARKETING  
CONCENTRATION**

Marketing includes all activities concerned with ascertaining and satisfying the needs and desires of individual and organizational buyers/consumers. It is, consequently, a function of prime importance in all forms of organizations. The marketing program is designed to facilitate entry into marketing and to facilitate long-term professional advancement. Course emphasis is placed on marketing management.

Positions in marketing offer the opportunity for specialization or diversification. Those who choose marketing as a career will find themselves involved in product development and improvement, consumer research, pricing, promotion, sales, and distribution. Professional careers are open to marketing majors in advertising firms, research organizations, retailing and wholesaling firms, and other service organizations, as well as a wide range of manufacturing and other industries devoted to supplying goods or services to meet the needs of the consumer/buyer.

FRESHMAN YEAR	Credit Hours	
	Fall	Spring
ENG 101-102 <sup>1</sup> .....	3	3
MATH 111-113 <sup>3</sup> .....	4	4
SCIENCE 121-122 <sup>2</sup> .....	3	3
HISTORY 201-202 .....	3	3
PE/AERO/BAND/HEALTH <sup>6</sup> .....	1	1
Non-Business Electives (PSY 201 & SPCH 230 Recommended) .....	3	3
	17	17

SOPHOMORE YEAR	Credit Hours	
	Fall	Spring
AC 211-212.....	3	3
MG 215 .....		3
EC 211-212.....	3	3
ENG 211-212 .....	3	3
PE/BAND/HEALTH <sup>6</sup> .....	1	1
HUMANITIES <sup>4</sup> .....	2	2
AM 201-202 .....	3	3
SOC SCI ELECT <sup>5</sup> .....	3	
	18	18

JUNIOR YEAR	Credit Hours	
	Fall	Spring
BE 315 .....	3	
FN 330 .....		3
MG 323 .....	3	
MG 301 .....	3	
MK 301 .....	3	
MG 302 .....		3
MK 302 .....		3
ECON OR FINANCE ELECT .....	3	
ACCOUNTING ELECTIVE .....	3	
NON-BUSINESS ELECTIVES .....	3	3
	18	15

SENIOR YEAR	Credit Hours	
	Fall	Spring
BL 300 .....	3	
MG 450 .....	3	
MK 455 .....	3	
MARKETING ELECTIVES.....	3	9
BUSINESS ELECTIVES.....	3	3
NON-BUSINESS ELECTIVES .....		3
	15	15

<sup>1</sup>Students deficient in English Composition take ENG 099.  
<sup>2</sup>Students may substitute a Natural Science sequence in Astronomy; Biology; Chemistry; Geology or Physics.  
<sup>3</sup>Students with no high school algebra take Math 100 and Math 101; students with one year take Math 101 before taking Math 111-113; transfer students must have the course content of Math 111 as described in the catalog.  
<sup>4</sup>Humanities includes Art 133; Music 131; Thea 120; Philosophy 201; Religious Studies—Old

Testament 211 and New Testament 212.  
<sup>5</sup>Social Science Elective includes Sociology, Social Welfare, American Government and Political Science, Geography or History.  
<sup>6</sup>Persons 25 years of age and older may waive this requirement. No substitution required.

**BUSINESS ADMINISTRATION  
MAJORS: REAL ESTATE AND  
URBAN DEVELOPMENT  
CONCENTRATION**

The curriculum for the concentration in Real Estate and Urban Development is designed for those students who are interested in fields concerning the allocation of urban land resources. Accordingly, students are trained for employment in both the private and public sectors. Fields of study include real estate brokerage, appraisal, law, finance, marketing, property management, land-use planning and development, and public and private policies applicable to real estate and urban development. The curriculum is structured to provide students with an understanding of (1) the specific activities involved in urban land development, (2) the forms of economics, social, physical, and legal services that arise from land use activities, (3) the optimum distribution of residential, commercial, industrial and other specialized land uses, (4) the activities in which real estate businessmen are engaged, and (5) public and private policies and action that are designed to improve our urban environment.

A number of electives are available to enable each student to pursue a challenging area of study within individual interest and educational background.

FRESHMAN YEAR	Credit Hours	
	Fall	Spring
ENG 101-102 <sup>1</sup> .....	3	3
MATH 111-113 <sup>3</sup> .....	4	4
SCIENCE 121-122 <sup>2</sup> .....	3	3
HISTORY 201-202 .....	3	3
PE/AERO/BAND/HEALTH <sup>6</sup> .....	1	1
Non-Business Elective (PSY 201 & SPCH 230 Recommended) .....	3	3
	17	17

SOPHOMORE YEAR	Credit Hours	
	Fall	Spring
AC 211-212 .....	3	
MG 215 .....		3
EC 211-212 .....	3	3
ENG 211-212 .....	3	3
PE/AERO/BAND/HEALTH <sup>6</sup> .....	1	1
HUMANITIES <sup>4</sup> .....	2	2
QM 201-202 .....	3	3
SOC SCI ELECT <sup>5</sup> .....	3	
	18	18



JUNIOR YEAR	Credit Hours	
	Fall	Spring
BE 315.....		3
FN 330.....		3
INFO SYS (MC 323).....	3	
MG 301.....	3	
MK 301.....	3	
MG 302.....		3
MK 302.....		3
ECON OR FINANCE ELECT.....	3	
ACCOUNTING ELECTIVE.....	3	
NON-BUSINESS ELECTIVES.....	3	3
	18	15

SENIOR YEAR	Credit Hours	
	Fall	Spring
BL 300.....	3	
MG 450.....	3	
RE 313.....	3	
RE 320.....	3	
REAL ESTATE ELECT.....	3	6
BUSINESS ELECTIVES.....		6
NON-BUSINESS ELECTIVE.....		3
	15	15

<sup>1</sup>Students deficient in English Composition take ENG 099.

<sup>2</sup>Students may substitute a Natural Science sequence in Astronomy; Biology; Chemistry; Geology or Physics.

<sup>3</sup>Students with no high school algebra take Math 100 and Math 101; students with one year take Math 101 before taking Math 111-113; transfer students must have the course content of Math 111 as described in the catalog.

<sup>4</sup>Humanities includes Art 133; Music 131; Thea 120; Philosophy 201; Religious Studies—Old Testament 211 and New Testament 212.

<sup>5</sup>Social Science Elective includes Sociology, Social Welfare, American Government and Political Science, Geography or History.

<sup>6</sup>Persons 25 years of age and older may waive this requirement. No substitution required.

## DEPARTMENT OF ECONOMICS AND FINANCE

**Bruce Hartman, Ph.D., Head**

The Department of Economics and Finance offers a program of instruction for those who expect to pursue careers in either economics, finance, or insurance and provides service courses for business and non-business majors. Students majoring in Economics and Finance must complete, in addition to the core and general requirements of the School of Business, 24 hours in Economics and Finance.

The program is aimed at helping students acquire: (1) an understanding of the objectives, functions, and institutions of a private enterprise economy, (2) a fundamental and rigorous tool kit for analysis, and (3), the ability to integrate economic and finance principles with various areas of Business Administration.

FRESHMAN YEAR	Credit Hours	
	Fall	Spring
ENG 101-102 <sup>1</sup> .....	3	3
MATH 111-113 <sup>3</sup> .....	4	4
SCIENCE 121-122 <sup>2</sup> .....	3	3
HISTORY 201-202.....	3	3
PE/AERO/BAND/HEALTH <sup>6</sup> .....	1	1
Non-Business Elective (PSY 201 & SPCH 230 Recommended).....	3	3
	17	17

SOPHOMORE YEAR	Credit Hours	
	Fall	Spring
AC 211-212.....	3	3
MG 215.....		3
EC 211-212.....	3	3
ENG 211-212.....	3	3
PE/AERO/BAND/HEALTH <sup>6</sup> .....	1	1
HUMANITIES <sup>4</sup> .....	2	2
QM 201-202.....	3	3
SOC SCI ELECT <sup>5</sup> .....	3	
	18	18

JUNIOR YEAR	Credit Hours	
	Fall	Spring
EC 311.....	3	
EC 312.....		3
FN 340.....		3
BE 315.....		3
FN 330.....	3	
MG 323.....	3	
MG 301.....	3	
MK 301.....	3	
MG 302.....	3	3
NON-BUSINESS ELECTIVES.....	3	3
	21	15

SENIOR YEAR	Credit Hours	
	Fall	Spring
FN 360.....	3	
FINANCE ELECTIVE.....	3	3
QM 300.....	3	
ECONOMICS ELECTIVE.....		3
BL 300.....	3	
MG 450.....		3
BUSINESS ELECTIVE (UD).....	3	3
NON-BUSINESS ELECTIVE.....		3
	15	15

<sup>1</sup>Students deficient in English Composition take ENG 099.

<sup>2</sup>Students may substitute a Natural Science sequence in Astronomy; Biology; Chemistry; Geology or Physics.

<sup>3</sup>Students with no high school algebra take Math 100 and Math 101; students with one year take Math 101 before taking Math 111-113; transfer students must have the course content of Math 111 as described in the catalog.

<sup>4</sup>Humanities includes Art 133; Music 131; Thea 120; Philosophy 201; Religious Studies—Old Testament 211 and New Testament 212.

<sup>5</sup>Social Science Elective includes Sociology, Social Welfare, American Government and Political Science, Geography or History.

<sup>6</sup>Persons 25 years of age and older may waive this requirement. No substitution required.

## DEPARTMENT OF BUSINESS EDUCATION & OFFICE MANAGEMENT

**Augustus Bankhead, Ed.D., Head**

The general objectives of a major in business education or in office management are: (1) to provide instruction in methods, techniques, and principles underlying modern business as a foundation for business careers; (2) to equip students with a knowledge and understanding of the changing and developing character of our economic society and the responsibility incumbent upon educated men and women engaged in economic activity; (3) to offer training in those phases of business that concern every office worker; (4) to train students as office administrators and as teachers of business subjects; (5) to promote the general objectives of education; (6) to offer exploratory and vocational information and experience in business; (7) to assist students in developing an appreciation of the place of business in society; (8) to meet individual needs of students who enter the University to prepare for positions in business organizations.

Students majoring in Business Education may be certified to teach business courses in high schools or junior high schools. Students may select a primary teaching emphasis in Stenography, Accounting, or General Business. A general curriculum pattern to be followed by students majoring in business education is outlined herein. In addition to taking courses outlined in the General Curriculum Pattern, students are to complete specified courses in the selected primary teaching emphasis as follows:

STENOGRAPHY:	OM 0307
	Advanced Shorthand
ACCOUNTING:	AC 0311-0312
	Intermediate Accounting
GENERAL BUSINESS:	EC 0440
	Consumer Economics

After completing the core of business courses prescribed by the State for certification and requirements set forth by the University in its teacher education program, the student may add other individual subject endorsements to the teaching certificate. Semester hours required for each subject matter endorsement appear under, Business Education Certification Requirements.

### BUSINESS EDUCATION CERTIFICATION CURRICULUM PATTERN

FRESHMAN YEAR	Credit Hours	
	Fall	Spring
ENG 101-102.....	3	3
MATH 111-113.....	4	4
HIST 201-202.....	3	3
SCI 121-122.....	3	3
MG 101.....	3	
MUS 131.....	2	
HEA 151.....		2
ART 133.....		2
	17	17



SOPHOMORE YEAR	Credit Hours	
	Fall	Spring
ENG 211-212 .....	3	3
AC 211-212 .....	3	3
EC 211-212 .....	3	3
BE 172 .....		3
EDUC 201 .....	3	
PSY 242 .....	3	
QM 201-202 .....	3	3
MAJOR EMPHASIS .....		3
	18	18

JUNIOR YEAR	Credit Hours	
	Fall	Spring
BE 315 .....	3	
BL 300 .....	3	
OM 221-330 .....	3	4
MG 301, 302 .....	3	3
MG 215, 323 .....	3	3
MAJOR EMPHASIS .....	3	
HEA 305 .....		2
MK 301 .....		3
FN 330 .....		3
	18	18

SENIOR YEAR	Credit Hours	
	Fall	Spring
EDUC 301, 491 .....	3	3
EDUC 387 .....	3	
EDUC 465 .....	3	
PSY 312 .....	3	
MG 450 .....	3	
BE 300, 371 .....	3	4
BE 472 .....		9
	18	16

**BUSINESS EDUCATION  
CERTIFICATION REQUIREMENTS**

For certification in business education by the State of Tennessee, students may qualify for endorsement in selected areas of business by completing a core of 12 semester hours in Accounting, Economics, and two of the following: Business Law, Introduction to Business, Business Mathematics, and Business Communications, and an additional 6 semester hours in other business courses.

Students completing the preceding requirements may secure single endorsements by completing the following semester hours (courses included in the business core requirements may be applied to the requirements for endorsements):

	Semester Hours
General Business: (including Introduction to business or business principles, business law and business mathematics.) .....	6
Bookkeeping .....	10
Typewriting: (including 3 hours of advanced typewriting.) .....	6
Shorthand: (including 3 hours of advanced shorthand.) .....	
Business Law .....	6
Economics: (principles and related subjects in that field.) .....	12
Salesmanship: (selected from salesmanship, marketing, merchandising, advertising and retailing.) .....	6

Secretarial Practice: (office practice plus certification in shorthand and typewriting.) .....	2
Business Machines .....	2
Business English .....	2
Business Arithmetic: (3 in mathematics 3 in business mathematics or 6 in business mathematics.) .....	6
Office or Clerical Practice: (Secretarial or clerical practice.) .....	2
Consumer Education: (Consumer economics or consumer education.) .....	2

**OFFICE MANAGEMENT**

Students majoring in Office Management plan to obtain supervisory, administrative, managerial, or executive secretarial positions in offices. The curriculum is designed to provide students with the knowledge and skills essential for leadership positions in the office and an appreciation of administrative services as a profession essential to the functioning of our economy.

FRESHMAN YEAR	Credit Hours	
	Fall	Spring
ENG 101-102 .....	3	3
HIST 201-202 .....	3	3
MATH 111-113 .....	4	4
MG 101 .....	3	
OM 221 <sup>1</sup> .....	3	
ART 133 .....	2	
MUS 131 .....		2
HEA 151 .....		2
BE 172 .....		3
	18	17

SOPHOMORE YEAR	Credit Hours	
	Fall	Spring
ENG 211-212 .....	3	3
SCI 121-122 .....	3	3
EC 211-212 .....	3	3
QM 201-202 .....	3	3
AC 211-212 .....	3	3
MG 215 .....	3	
OM 208 <sup>2</sup> .....		3
	18	18

JUNIOR YEAR	Credit Hours	
	Fall	Spring
BL 300 .....	3	
BE 315 .....	3	
OM 307, 330 .....	3	4
MG 301-302 .....	3	3
MK 301 .....	3	
HEA 305 .....	2	
MG 323 .....		3
FN 330 .....		3
ELECTIVE (300-400)* .....		3
	17	16

SENIOR YEAR	Credit Hours	
	Fall	Spring
OM 430 .....	3	
MG 403, 450 .....	3	3
PSY 350 or SOC 350 .....	3	
OM 441, 442 .....		6
ELECTIVES (300-400)* .....	6	6
	15	15

\*Some suggested electives: Communication 375, Journalism 301, 310.

<sup>1</sup>Students who do not possess minimum proficiency of 50 words a minute and skill in production will be placed in appropriate lower level courses.

<sup>2</sup>Students who have not had Gregg shorthand should enroll in OM207, Beginning Shorthand.

**ASSOCIATE OF SCIENCE DEGREE  
PROGRAM**

The Associate Degree is suggested for the student who wishes to prepare to be an executive secretary or a legal executive secretary with paralegal responsibilities. The curricula are designed to provide the student with the typewriting, shorthand, and machine skills needed by those who wish to attain a high-level secretarial or stenographic position and the knowledge and skills necessary for taking independent action and exercising judgment in an office.

**ADMINISTRATIVE ASSISTANT\***

FIRST SEMESTER	Credit Hours
ENG 101 (Fr Composition) .....	3
**OM 121 (Beg Typewriting) .....	3
**OM 207 (Beg Shorthand) .....	3
MG 101 (Bus Principles) .....	3
BE 172 (Math of Finance) .....	3
	15

SECOND SEMESTER	Credit Hours
ENG 102 (Fr Composition) .....	3
**OM 122 (Inter Typewriting) .....	3
**OM 208 (Inter Shorthand) .....	3
EC 211 (Princ of Econ) .....	3
PSY 204 (Gen Psychology) .....	3
	15

THIRD SEMESTER	Credit Hours
SPCH 230 (Bus & Prof Speech) .....	3
OM 221 (Prod Typewriting) .....	3
OM 307 (Adv Shorthand) .....	3
AC 211 (Accounting) .....	3
***Elective .....	3
QM 0215 Data Processing .....	3
	18

FOURTH SEMESTER	Credit Hours
OM 330 (Exec of Pro. & System) .....	4
OM 430 (Adm Office Management) .....	3
BE 315 (Bus Communications) .....	3
OM 441 (Office Internship) .....	3
***Electives .....	6
	19

\*Student must maintain 2.25 average in OM courses.

\*\*Students may take proficiency examinations for credit in Typewriting 121, 122, and shorthand 207 and 208.

\*\*\*All electives must be approved by student's advisor.



**LEGAL EXECUTIVE SECRETARY****FIRST SEMESTER**

	Credit Hours
Eng 101 (English) .....	3
**OM 121 (Beg Typewriting) .....	3
**OM 201 (Beg Shorthand) .....	3
MG 101 (Bus Principles) .....	3
BE 172 (Math of Finance) .....	3
	<u>15</u>

**SECOND SEMESTER**

	Credit Hours
Eng 102 (English) .....	3
**OM 122 (Int Typewriting) .....	3
**OM 208 (Int Shorthand) .....	3
ECO 211 (Economics) .....	3
PSY 201 (Psychology) .....	3
OM 210 (Intro to Law and the Tennessee Legal System) .....	3
	<u>18</u>

**THIRD SEMESTER**

	Credit Hours
SPCH 230 (Bus & Prof Speech) .....	3
OM 221 (Prod Typewriting) .....	3
OM 307 (Adv Shorthand) .....	3
AC 211 (Accounting) .....	3
QM 215 (Data Processing) .....	3
QM 230 (Tech Legal Prac I) .....	3
	<u>18</u>

**FOURTH SEMESTER**

	Credit Hours
OM 330 (Exec Office Pro & Sys) .....	4
OM 430 (Adm Office Management) .....	3
BE 315 (Bus Communications) .....	3
OM 441 (Office Internship) .....	3
OM 240 (Tech Legal Prac II) .....	3
	<u>16</u>

Student must maintain 2.25 average in OM courses.

\*\*Student may take proficiency exams for credit in Typewriting OM 121, 122, and shorthand OM 207, 208.

**ELIGIBILITY OF CERTIFIED  
PROFESSIONAL SECRETARIES  
FOR COURSE CREDIT**

Credit is available in certain courses at Tennessee State University for the passing of the complete CPS examination. Before this credit can be granted, the CPS must have already received credit in at least 9 hours at Tennessee State University. Credit for the following courses may be recorded with a grade of "B" if credit has not already been received for such courses:

Accounting 211 .....	3
Administrative Office Management OM 430 .....	3
Business Law 323 .....	3
Business Principles MG 101 .....	3
Economics 211 .....	3
Executive Office Procedures and Systems OM 330 .....	3

Shorthand OM 207-208 .....	6
Typewriting OM 121-122 .....	6
<b>TOTAL HOURS</b> .....	<u>30</u>

Upon receipt of formal application and payment of \$5.00, verification will be made of CPS status and credit already received from Tennessee State University. Credit will then be recorded.

This acceptance of the CPS examination is subject to change (1) whenever the content of the CPS examination is revised so that it does not correspond with the content of the course now designated for credit or (2) if the courses at Tennessee State University are revised substantially so as to achieve the same result.

To make an "A" in any course, the CPS would be required to take the credit examination, which is available for a given course, and achieve the "A" standard. If the "A" standard is not reached, the "B" grade would be recorded.

**CURRICULUM FOR  
INTERDISCIPLINARY  
OPTIONS IN BUSINESS  
ADMINISTRATION AND FRENCH  
OR SPANISH**

	Credit Hours	
	Fall	Spring
<b>FRESHMAN YEAR</b>		
FOR LANG 101-2 .....	4	4
ENG 101-2 .....	3	3
MATH 111-113 .....	4	3
HIST 201-2 .....	3	3
ORIENTATION .....	1	
ART 133 .....		2
PE or AERO .....	1	1
	<u>16</u>	<u>16</u>

	Credit Hours	
	Fall	Spring
<b>SOPHOMORE YEAR</b>		
FOR LANG 201-2 .....	3	3
FOR LANG 300 .....		2
SCI .....	3	3
ENG 211-212 .....	3	3
ACCTG 211-212 .....	3	3
ECON 211-212 .....	3	3
MUSIC 131 .....	2	
	<u>17</u>	<u>17</u>

	Credit Hours	
	Fall	Spring
<b>JUNIOR YEAR</b>		
FOR LANG 301-2 .....	3	3
QM 201, 202 .....	3	3
QM 215, BE 315 .....	3	3
MK 301 .....		3
MG 301, 302 .....	3	3
PHIL 340 .....		3
Elective (300-400) .....	6	
	<u>18</u>	<u>18</u>

	Credit Hours	
	Fall	Spring
<b>SENIOR YEAR</b>		
FOR LANG 400 .....	3	
FOR LANG 450 .....	3	
FOR LANG 480 .....		3
FOR LANG 420 .....		2
BL 300, FN 330 .....	3	3
MG 323, MG 450 .....	3	3
Electives (300-400) .....	6	6
	<u>18</u>	<u>17</u>

Students may enroll with a double major:

- A foreign language and Business Administration
- A foreign language and English
- A foreign language and Political Science
- A foreign language and Communications
- A foreign language and History

**SCHOOL OF BUSINESS  
COURSE DESCRIPTIONS  
ACCOUNTING (AC)**

**AC 211, 212. Principles of Accounting. (3-3)** Basic concepts of accounting, the accounting cycle, accounting systems including ethical considerations, and components of the financial statements. Continues with an analysis of financial data, forms of business organizations in our legal environment, departmental accounting, manufacturing, basic cost accounting, cost-volume-profit analysis, and managerial decisions. (TSU-211-12) (UTN 2110-20-30)

**AC 311, 312. Intermediate Accounting. (3-3)** Broad theoretical structure of accounting including underlying environmental assumptions, expanded review of the accounting cycle and components of the financial statements, and future and present value concepts. Continues with a discussion of corporate capital structure, special problem areas (e.g., incomplete data, pensions, leases, and price-level accounting), and in-depth analysis of financial statements. Prerequisites: AC 212. (TSU-311-312) (UTN 311-20-30)

**AC 314. Introduction to Cost Accounting. (3)** Cost behavior and budgeting concepts, and system design and manufacturing cost systems including job order and process cost. Prerequisites: AC 212. (TSU-314) (UTN 3210).

**AC 315. Management Cost Accounting. (3)** Continuation of AC 314, standard cost, budgets, analysis of cost variances for managerial purposes, direct costing and cost-volume-profit analysis. Prerequisites: AC 314. (TSU-315) (UTN 3220).

**AC 317. Managerial Accounting. (3)** Interpretation and use of accounting data by management in planning, controlling, and decision making for business activities. CREDIT NOT ALLOWED ON ACCOUNTING MAJOR. Prerequisites: AC 212. (TSU-317)

**AC 400. Advanced Accounting. (3)** Theory and problems in partnership formation operation, and dissolution, joint ventures, installment sales, consignments, the use of actuarial science tables in accounting, government accounting. Prerequisites: AC 312. (TSU-AC 400) (UTN-4310).

**AC 401. Consolidating Interrelated Business Entities. (3)** Principles and techniques of consolidated financial statements; foreign branches and subsidiaries. Prerequisites: AC 312 (TSU-None) (UTN-AC 4140)

**AC 403. Institutional Accounting. (3)** Accounting theory and practice applicable to institutions, municipalities, states and local units of government, organizations, fiscal procedures, budgetary control, classification and uses of funds, auditing, financial statements and reports. Prerequisites: AC 212 (TSU-AC 320) (UTN 4510).



**AC 411. Federal Income Tax Accounting. (3)** Determination of taxable income, and other aspects of tax accounting are emphasized. Particular attention is given to preparation of federal income tax return for individuals. Research methodology is also introduced. Prerequisite: AC 212. (TSU-AC 411) (UTN-AC 4410).

**AC 412. Advanced Federal Income Tax Accounting. (3)** Emphasis is placed on corporation, partnership, estate and trust tax returns. Consideration is also given to gift taxes, as well as research. Prerequisites: AC 411. (TSU-AC 412) (UTN-4420).

**AC 413. Theory and Practice of Auditing. (3)** Theory and principles of audit practice and procedure in verifying accounts and supplementary data, the preparation of findings and reports in conformance with the purpose of the audit, illustrative auditor's report and the liability of an auditor. Prerequisites: AC 312 (TSU-AC 413) (UTN 4420)

**AC 415. Accounting Systems. (3)** Principles underlying the establishment of complete accounting systems and the application of such principles to typical business organization. Special emphasis on cost control. Prerequisite: AC 311.

**AC 420. Accounting Theory. (3)** A study of the propositions, axioms, theorems, controversial accounting concepts, authoritative statements, and research studies of professional organizations. Prerequisite: AC 311.

## BUSINESS LAW (BL)

**BL 300. Legal Environment of Business. (3)** A study of the legal aspects of the business environment and the legal rights and potential liabilities of businessmen. The presentation of law as an expanding social and political institution in the environment of business. Includes the development and nature of the legal system; business crimes; the law of torts; constitutional limitations on regulatory powers; legislative, judicial, and administrative control of business activity through tax laws, antitrust laws, laws of employment, labor laws, and consumer and debtor protection laws. (TSU-BA 323) (UTN-BL 4110)

**BL 323. Business Law I. (3)** A study of the legal rights and potential liabilities of businessmen, includes an introduction to the nature of the legal system; the basic law of contracts. Uniform Commercial Code, sales, secured transactions, and bankruptcy. Prerequisite: Junior standing. (TSU-None) (UTN-BL 4120).

**BL 324. Business Law II. (3)** A study of the legal rights and potential liabilities of businessmen, includes the basic legal principles of agency; partnerships; corporations and securities; personal property and bailment; real property and environmental controls; U.C.C. and commercial paper. Prerequisite: Bus. Law 323 or advisor's consent. (TSU-None) (UTN-4130).

**BL 420. Personal Law. (3)** Fundamental principles of American and Tennessee law analyzed through case study of the law's application to the individual. Student participation required in examining typical legal problems

associated with the family home and automobile ownership, negligence, employment, death, taxation and consumerism. (TSU-None) (UTN-BL 3330).

**BL 430. Environmental and Land Law. (3)** A survey of federal, state, and local laws on conservation and regulation of environmental and land use matters. Includes an introductory constitutional framework of environmental law and market forces, politics and administration of such laws. Prerequisite: Junior standing. (TSU-None) (UTN-BL 3010)

## BUSINESS EDUCATION (BE)

**BE 172. Mathematics of Finance. (3)** The application of the fundamentals of mathematics to business problems with the aid of calculators. Emphasis on problems involving discounts, simple and compound interest, insurance and payroll, etc. (TSU-None) (UTN-None)

**BE 315. Business Communications. (3)** Study of principles, practices, and mechanics of writing in modern business, and the ability to compose and edit business correspondence. (Prerequisite: Jr/Standing). (TSU BE 315) (UTN OA 4310)

**BE 335. Report Writing. (3)** Designed to help students to develop a clear, concise and correct writing style: to help students collect, analyze, organize, interpret and present information to solve business problems. (Prerequisite: Jr. Standing.) (TSU BA 335) (UTN OA 4320)

**BE 300. Principles and Philosophy Vocational Business Education. (3)** A study of the historical background, philosophy, objectives, principles, problems, and trends in vocational business education. (Prerequisite: Admission to Teacher Education Program). (TSU-BE 300) (UTN-None)

**BE 371. Systems, Methods, and Procedures for Teaching Business Subjects. (4)** Strategies for designing procedures and directing learning in business subjects. (Prerequisite: Admission to the Teacher Education Program). (TSU BE 371. UTN-None). Field Experience required.

**BE 472. Student Teaching. (9)** Actual classroom experience in secondary schools under the charge of expert teachers in cooperating schools. (Prerequisite: All methods and professional core courses). (TSU BE 472) (UTN-None)

## ECONOMICS (EC)

**EC 211. Principles of Economics I. (3)** Methodology of economics, fundamentals of macroeconomics, fiscal policy, and fundamentals of monetary policy. Prerequisite: Math 111. (TSU-EC 211) (UTN 2110-20).

**EC 212. Principles of Economics II. (3)** Economic growth, and microeconomics, some domestic and international applications of economics and comparative economic systems. Prerequisite: EC 211. (TSU-EC 212) (UTN-EC 2130).

**EC 221. Development of the American Economy. (3)** From first settlement to present: quantity of goods and quality of life: employment and leisure; domestic and foreign

commerce; poverty and affluence; money and prices; slavery, agriculture, and ghettos; business and labor; and roles and policies of governments. (TSU-None) (UTN-None).

**EC 311. Intermediate Microeconomic Theory. (3)** The price system and allocation of resources; demand, supply and distribution. Prerequisite: EC 212. (TSU-EC 302) (UTN-3110).

**EC 312. Intermediate Macroeconomic Theory. (3)** Aggregate demand, aggregate supply and equilibrium level of employment; the price level, inflation and deflation. Prerequisite: EC 212. (TSU-None) (UTN 3120).

**EC 320. Money and Banking. (3)** Nature and functions of money; analysis of monetary systems; money creating role of commercial banks and the Federal Reserve System; determinants of money supply and demand; monetary theory and policy. Prereq: EC 212. (TSU-EC 420) (UTN-3120).

**EC 330. Principles of Labor Economics. (3)** A study of the labor market: American labor movement; union history, structure and philosophy; labor problem analysis; industrial disputes and labor legislation. Prerequisite: EC 212. (TSU-EC 301) (UTN-EC 3410).

**EC 335. Economics Analysis and Management in Construction. (3)** This survey course examines the management, economic and financial aspects of construction and construction contracts. Topics covered include the construction management concept, investment project financing and control, organization and role of record keeping in managing construction. Network analysis—CPM, PERT and the Cyclone System—provides the framework for discussing these topics. Prerequisites: By permission of the instructor; Junior level students with backgrounds in business administration, engineering, architecture and accounting are particularly welcome. (TSU-None) (UTN-None).

**EC 410. International Economics. (3)** Introduction to the tools and techniques of international economics analysis concerning the basic theory of free trade, tariffs and commercial policy as well as international monetary analysis. Prerequisite: EC 212. (TSU-EC 405) (UTN-EC 3210).

**EC 420. Government and Business. (3)** The relation of government to business in a competitive economy; prevention of monopoly and concentration through the antitrust laws; patent policy; alternatives to competition; government control and public ownership. Prerequisite: 212. (TSU-None) (UTN-EC 3340).

**EC 440. Consumer Economics. (3)** Designed to acquaint the student with the character and significance of the factors which determine and govern consumption, particularly as they are related to the prosperity and stability of the economic system. Prerequisite: EC 212. (TSU-EC 307) (UTN-None)

**EC 441. Labor Legislation. (3)** The economic background and effects of governmental regulation of labor relations and efforts to provide economic security. Emphasis on the National Labor Relations Act, Fair Labor Standards Act, Social Security Act, Workmen's



Compensation laws, and related matters. Prerequisite: EC 212. (TSU-None) (UTN-EC 4430-4440).

**EC 442. Collective Bargaining. (3)** Organization of labor management for collective bargaining, with emphasis on the private sector. Study of subject matter and procedure for collective bargaining under the National Labor Relations Act as amended and similar legislation. Prerequisite: EC 330. (same as MG 419). (TSU-MG 424) (TUN-EC 4470)

**EC 451. Public Finance. (3)** Survey of institutions and theories of government finance. Effects of public expenditures; functions of public revenues; form of taxation; tax criteria; determination of tax policy; public borrowing; debt management; fiscal policy. Prerequisite: EC 212. (TSU-None) (UTN-None).

**EC 452. Urban Economics. (3)** Urban history, location theory, city growth, and urban problems. Prerequisite: EC 212. (TSU-None) (UTN-None)

**EC 461. History of Economic Thought. (3)** A review of the development of economic thought, tools of analysis and economics as a social science together with an analysis of the social-economic conditions which influenced this development. Period covered: 1776 through 1936. Prerequisite: EC 212. (TSU-None) (UTN-None).

**EC 462. Comparative Economic Systems. (3)** The study and theories underlying capitalism, fascism, socialism, communism, and other economic systems. Prerequisite: EC 212. (TSU-EC 404) (UTN-None)

**EC 470. Managerial Economics. (3)** Application of economic theory to business decision making, emphasis on profit objectives, measurement and forecasting demand and costs and capital budgeting. Prerequisite: EC 212 and senior standing. (TSU-419) (UTN-4110).

**EC 480. Current Economic Problems. (3)** Examination of key economic issues. Such major objectives as economic progress, and economic justice provide a general framework for analyzing economic growth, inflation, unemployment, public debt, income maintenance, agriculture and international economic affairs. Prerequisite: EC 212. (TSU-EC 315) (UTN-None.)

**EC 498-99. Independent Study in Business. (3)** This course allows the outstanding student to investigate in depth approved topics of the student's choice. Individual studies will be coordinated by a senior member of the departmental faculty. Prerequisite: Permission of Department Head. (TSU-None) (UTN-None).

## FINANCE (FN)

**FN 336. Credits and Collections. (3)** Principles and practices of credit and collection management, consumer credit, business credit, credit investigation. Prerequisite: FN 330. (TSU-None) (UTN-4210).

**FN 340. Financial Markets and Institutions. (3)** Operating characteristics, regulation, flows of funds intermediation, major sectors of money and capital markets and the institutions operating therein. Prerequisite: FN 330. (TSU-None) (UTN-FN 4520).

**FN 350. Financial Administration. (3)** The application of business finance to short cases in asset and liability management, valuation, financial analysis, operations, and planning. Prerequisite: FN 330. (TSU-None) (UTN-None)

**FN 360. Investment Theory. (3)** Theory of investment value, investment media and strategies, risk, returns, price behavior, investment techniques, portfolios. Prerequisite: FN 330. (TSU-FN 426) (UTN-FN 4110)

**FN 445. Commercial Bank Management. (3)** Organization, administration of commercial banks, balance sheet management, loans and investments. Prerequisite: FN 340. (TSU-None) (UTN-None).

**FN 450. Corporate Asset Management. (30)** Optimum fund uses, allocation of funds capital budgeting, sophisticated techniques of analysis. Prerequisite: FN 350. (TSU-None) (UTN-None).

**FN 460. Security Analysis. (3)** Fundamental and technical analysis, valuation of specific types of securities, advanced models and techniques of analysis, securities with unique features, computer analysis of securities. Prerequisite: FN 360. (TSU-None) (UTN-FN 4120).

## INSURANCE (IN)

**IN 370. Introduction to Insurance. (3)** Principles, practices, and major coverages on life casualty and property insurance. Prerequisite: Junior Standing. (TSU-BA 433) (UTN-IN 3020).

**IN 375. Individual Life and Health Insurance. (3)** Basic life, health, and annuity contracts, risk selection procedures, government regulation. Prerequisite: IN 370. (TSU-None) (HTN-IN 3030).

**IN 475. Group Insurance. (3)** Group life and health products, marketing underwriting, reinsurance premiums, and reserves. Prerequisite: IN 370 (TSU-None) (UTN-IN 4030).

**IN 485. Property and Casualty Insurance. (3)** Basic property and casualty insurance contracts. Emphasis on technical aspects and coverages applicable. Prerequisite: IN 370. (TSU-None) (UTN-IN 4210).

## MANAGEMENT (MG)

**MG 100. Business Orientation. (1)** Designed to aid in the adjustment of freshmen to the college community and to the field of business. (TSU BE 100) (UTN-None)

**MG 101. Business Principles. (3)** A survey of the fundamental principles of business organization, banking, credit, management, salesmanship, and accounting. (For freshman business students and students in other fields.) (TSU BA 101) (UTN-MG 1110).

**MG 215. Basic Computer Science. (3)** A study of the principles and applications of data processing in business. A survey of information system concepts, systems analysis and design, tools for analysis and design, the impact of the computer on the organization, programming languages and introduction to programming BASIC. (TSU-MS 301) (UTN-None).

**MG 300. Survey of Management for Non-Business Majors. (3)** A survey of the relationships between business management and the environments with which it deals. Topics concerning managerial principles and functions as applied to business, government, and service organizations. Focus will be placed on implications of management skills and processes for business/society relationships in our changing environment. NON-BUSINESS MAJORS ONLY. NO CREDIT TOWARD BUSINESS DEGREE. (TSU-None) (UTN-None).

**MG 301. Management-Organization Theory and Behavior. (3)** Analysis of the basic managerial functions of setting objectives, planning, organizing, directing, and controlling. Introduces theoretical foundation and models for design and analysis of organizational systems, processes and human behavior in organizations, leadership, motivation, conflict in group dynamics. Emphasis will be on building predictable systems for obtaining optimal results. Prerequisite: Junior Standing (Core Course). (TSU-MG 300) (UTN-MG 3010).

**MG 302. Production and Operations Management I. (3)** Analysis and synthesis of concepts, analytical tools, and techniques used in the production of goods and services. (Including application of mathematics and other tools for optimal decisions making in the use of resources. Also integrates operational functions with other business functions. (Prerequisite: Junior standing. Math 113 and OM 202. (TSU-MG 332) (UTN 3110).

**MG 303. Management of Service Organizations. (3)** Decision making in service operations such as health care and delivery, food/restaurant, hotel/motel, banking and finance, transportation, leisure, and government. Both conceptual framework and application of management techniques to problems peculiar to service organizations. Prerequisite: MG 301. (TSU-None) (UTN-None).

**MG 304. Management Science I. (3)** Fundamentals of management science. Theory and application of mathematical, statistical, and operations research techniques to problems in industry, business and government. Prerequisite: All core Math and QM 202. (Same as QM 300). (TSU-MS 412) (UTN-MG 3210).

**MG 315. Computer Programming—COBOL. (3)** A general overview of Data Processing. Considerations of peripheral equipment, binary number systems, core storage, and flow charting. The course is designed to develop computer programming techniques using the COBOL language to the point of practical business applications. No previous programming experience is required. (TSU-MS 302.) (UTN-CS 3410). Prerequisite: MG 215.

**MG 316. Computer Programming—FORTRAN. (3)** An introductory computer programming course designed to develop skills and techniques using the FORTRAN IV language on the IBM 1130 and 380 machines. Practical business applications including input/output, quantitative manipulation and data file management. No previous programming experience is required. (TSU-MS 303) (UTN-CS 2140). Prerequisite: MG 215.



**MG 320. Small Business Management.** (3) Managerial and business theory functions and processes applied to small business. Emphasis will be given to problems and practices peculiar to the establishment and operation of small business enterprises. Opportunities, hazards, strategies, and objectives will be analyzed from broad/managerial and specific functional aspects. Case Studies, research selected presentation, by small business owners and other teaching methodologies will be used. Prerequisite: Senior standing; completion of core junior level business courses. (TSU-MG 320) (UTN-None).

**MG 323. Information Systems Analysis.** (3) Information analysis and logical design concepts for business information systems. Programmed decision making, planning for information needs, integrating systems, the system development life cycle, determining system specifications and the economics of alternative systems. Prerequisite: Junior Standing, QM 215. Economics. (TSU-None) (UTN-AC 3630).

**MG 324-25. Business Consulting and Entrepreneurship I and II.** (6) Opportunities for consulting with small business or generating prospects and plans for new enterprises. Provides experience that extends and solidifies what is learned in the classroom and allows students trial and error experiences in a relative protected environment. Lectures and discussion, but emphasis on problem solution by the student. Prerequisite: Approval of instructor. (TSU-None) (UTN-MG 4440-50).

**MG 402. Production and Operations Management II.** (3) Continuation of MG 304. In depth study of operations and production problems and application of selected decision making tools and techniques used in the production of goods and services. Included will be a computer based management decision game. Prerequisite: MG 301, MG 302. (TSU-None) (UTN-MG 3120).

**MG 403. Personnel Administration.** (3) Analysis of theories, policies, procedures, practices, regulations relevant to attracting retaining, and directing a competent work force. Analysis of the basic personnel functions with emphasis on the fact that all managers are "personnel managers." Integration of scientific theory, procedures, instruments and federal regulations into personnel selection, placement, promotion, wage and salary administration, employee benefits, and security programs. Prerequisite: MG 301. (TSU-MG 423) (UTN-MG 4460).

**MG 404. Organization Theory.** (3) Theoretical Foundations for the study and analysis of organizations, including theory development and important research findings. Examines aspects of various systems and behavior. Emphasis will be on the dynamics, efficiency and effectiveness of organizational systems. Prerequisite: MG 301. (TSU-MG 331) (UTN-MG 4320).

**MG 405. Behavior in Organizations.** (3) Theoretical foundations for the study and analysis of human behavior in complex social organizations and of related managerial problems and challenges. A study of management and behavioral science concepts. Techniques and research as applied toward increasing human productivity and individual and group sat-

isfaction in organizational settings. Prerequisite: MG 301. (TSU-MG 351) (UTN-MG 4610).

**MG 406. Special Topics in Personnel Administration.** (3) Research into selected areas of Personnel Management. Prerequisite: Completion of Management 403 with a "B" or better and approval of instructor. (TSU-None) (UTN-None)

**MG 407. Industrial Relations.** (3) Labor Relations, Federal Legislation, and the collective bargaining process; case studies and arbitration cases in public and private sectors; impact of collective bargaining on the economy, Union-Management problems and opportunities in both the public and private sector. (TSU-MG 424) (UTN-None)

**MG 408. Personnel Legislation and Regulations.** (3) Selected experts in conjunction with student participation will review new Federal legislation and administrative decisions affecting the operation of production and service systems. (External and Internal Environmental Constraints: Equal Employment and Pay regulations: OSHA, Consumer Legislation.) Prerequisite: MG 403 (TSU-None) (UTN-None).

**MG 409. Human Resource Planning and Evaluation (Manpower Management Practices)** (3) Forecasting future human resource needs based on organizational strategies and personal objectives. Performing management and other job audits to assess strength and weaknesses of organizational posture formulating and administering basic policies in human resource management and development; development and comprehensive administrative processes, decision making systems, and evaluative processes. Prerequisite: MG 403. (TSU-None) (UTN-None).

**MG 410. Compensation Administration.** (3) Research, review, and application of job evaluation and other methodologies as a basis for establishing and controlling personnel equitable wage, salary, and benefit programs. Included will be a review of relevant theories, methods, and practices; case analysis, review of current and pending legislation and projection of future compensation practices; and development of a comprehensive compensation plan. Prerequisite: MG 301. (TSU-None) (UTN-MG 4470).

**MG 411. Operative Supervision.** (3) Operations (goods and services) supervision with emphasis on objectives, planning, organizing, scheduling, directing, and controlling work operations. Learning theory, employee development and training, use of resources, methods performance measurement, evaluation, and human problems will be stressed. Prerequisite: MG 301. (TSU-MG 422) (UTN-MG 4330).

**MG 412. International Business Management.** (3) Analysis of managerial and business theory functions and processes practiced by multinational and foreign firms. A study of the products and services, strategies, objectives, policies and organizational structures of enterprises operating in various social, economical, political, and cultural environments. Cases, research, and other teaching methodologies will be employed. Prerequisite: Senior standing. MG 301. (TSU-MG 459) (UTN-None)

**MG 413. Operations Planning and Control.** (3) Analysis of the operations control function with application of mathematical and statistical techniques. Techniques of long and short term forecasting; material and capacity requirements, planning, integration of scheduling and operations flows into the total operation functions. Included will be a review and analysis of key supporting functions. Prerequisite: MG 302. (TSU-None) (UTN-MG 4630).

**MG 415. Systems Design and Implementation.** (3) Principles and techniques of design including types and levels of design, documentation techniques, hardware and software evaluation, software design concepts, data base concepts, implementation and testing procedures and long run MIS planning. Prerequisite: MG 323. (TSU-MG 368) (UTN-AC 4630).

**MG 416. Applied Management Practicum.** (3) A cooperative program with Junior Achievement of American offering a leadership role in a simulated entrepreneurial experience. Prerequisite: Business degree students with senior standing, a GPA of 2.5 or better and having completed certain core business courses are eligible. For application and prerequisite details contact the Dean of the School. (TSU-None) (UTN-MG 3130).

**MG 417. Seminar-Management Innovations.** (3) Research and review of key creative managerial innovations that revitalized dying enterprises, created new enterprises, greatly enhanced products, service, contribution, profitability growth, and such for national, foreign, or multi-national organizations. Attempts will be made to identify and assign innovative and creative action needed for specific problem areas. Prerequisite: Senior Standing (TSU-None) (UTN-None).

**MG 418. Management Science II.** (3) A continuation of Management Science I. Advanced theory and application of management science tools and techniques to managerial decision. Prerequisite: MG 304. (TSU-MS 412) (UTN-None).

**MG 419. Collective Bargaining.** Analysis of collective bargaining processes, procedures, legislation in private and public sector organizations. Review of current and future implications for management. (Same as EC 442). (TSU-MG 424) (UTN-None).

**MG 450. Business Policy.** (3) Course designed to integrate the student's knowledge of business functional area disciplines into the analysis and solution of managerial and business problems. Analysis of strategies, objectives, policies, business problems, functional areas and managerial decision making through the case study method. Written and required. Prerequisite: Completion of core business courses; senior standing. (TSU-MG 450) (UTN-MG 4430)

**MG 468. General Systems Concepts.** (3) An introduction to systems thinking, general systems theory, cybernetics, the organization as a system, information technology, and applications of management systems. Prerequisite: MG 301, senior standing. (TSU-MG 368).

**MG 480. Internship.** (3-6) Supervised and approved program and learning experiences



undertaken by students in governmental, business, or industry setting. Formal proposals, project objectives, or learning plans must be reviewed and approved, by faculty. Student activity and progress must be monitored, evaluated and graded by an assigned full-time faculty. Prerequisite: Consent of Advisor. (TSU-BA 440) (UTN-None).

**MG 499. Independent Study in Business.** (3) This course allows the outstanding student to investigate, in depth, approved business topics of the student's choice. Individual studies will be coordinated by a senior member of the departmental faculty. Prerequisite: Permission of Department Head. (TSU-BA 435). (UTN-None).

## MARKETING (MK)

**MK 301. Basic Marketing.** (3) General survey of marketing in our economy. Influence on environment social, economic, ethical, legal, and technologic forces on marketing activities. Assessment of dimensions of the organizations' marketing program. Prerequisite: Junior standing and EC 212. (TSU-MK 326) (UTN-MK 3110).

**MK 302. Marketing Management.** (3) Analysis of marketing management process including identifying marketing opportunities, planning marketing programs, and implementing competitive strategies. Cases are used to help develop an understanding of decision marketing. Prerequisite: MK 301. (TSU MK 326) (UTN-MK 3120).

**MK 303. Sales Fundamentals.** (3) Covers the basic fundamentals of salesmanship, sales theory, sales techniques, sales role playing, and guest lectures by practicing sales persons. The role of personal selling in our economy is included to provide a deeper understanding of the contributions made by this marketing activity. Prerequisite: MK 301. (TSU-MK 329) (UTN-None).

**MK 405. Consumer-Buyer Behavior** (3) Industrial and ultimate consumer purchasing behavior. An analysis of theories underlying buying decision processes with an emphasis on the marketing management implications of buyer behavior on executive action. Prerequisite: MK 301 and 302. (TSU-MK 334) (UTN-MK 4210).

**MK 410. Industrial Marketing Management.** (3) Analysis, from management perspective, of internal and external environments affecting the industrial marketing manager's decision relative to characteristics of industrial marketing, research, distribution, promotion, and general marketing problems and policies. Prerequisite: MK 301 and 302. (TSU-None) (UTN-None).

**MK 415. Advertising Fundamentals.** (3) A study of the role of advertising in the economy and the use of advertising in marketing management decision making. Discusses mass communications theories and concepts. Advertising and its relationship to the firm's marketing program. Prerequisite: MK 301. (TSU-MK 431) (UTN-MK 4150).

**MK 420. Purchasing.** (3) A study of the policies for effective and efficient procurement of goods and services for today's industry. Case study applications are used to deal with the

various parts of the procurement process including the measurement and evaluation of purchasing performance. Prerequisite: MK 301. (TSU-None) (UTN-None).

**MK 425. Retailing Management.** (3) Structure and environment of retailing and its relationship to other parts of the economy. Analysis of retailing marketing and financial strategy, retail store operation, merchandising decision, advertising and sales promotion activities and accounting controls. Prerequisite: MK 301. (TSU-MK 3289) (UTN-MK 4310/420).

**MK 430. Applied Marketing Research.** (3) Quantitative concepts, behavior concepts, and marketing research methodology in study of consumer purchasing, sales forecasting, and other areas of marketing management. Application of research methodology to help solve marketing management problems. Prerequisite: MK 301-302 and QM 201-202. (TSU-MK 451) (UTN-MK 4510).

**MK 435. Distribution Channels, Structure, and Management.** (3) Distribution channel's functions, structures, and processes; the channel as an economic and behavioral system; relationship between channel members: Vertical marketing systems; the evaluation of channel performance and future trends. Prerequisite: MK 301. (TSU-MK 4444) (UTN-MK 3210/3220).

**MK 440. Environmental Issues in Marketing.** (3) The changing nature of marketing environment, and impact on marketing strategy and decision making. Marketing's role in society, social marketing, societal interfaces, and the ethical and social responsibility of marketing. Prerequisite: MK 301, 302. (TSU-None) (UTN-None).

**MK 445. Credit and Collections (See Finance 336).** (3) Principles and practices of credit and collection management, consumer credit, business credit, credit investigation. Prerequisite: Fin. 330. (TSU-None) (UTN-None).

**MK 450. Marketing in Nonbusiness Organizations.** (3) Analysis and application of marketing concepts to nonbusiness organizations. Consumer behavior, market segmentation, product differentiation, promotion mix, channels of distribution and related concepts are analyzed in terms of both private and public non-business organizations. Prerequisite: MK 301. (TSU-None) (UTN-None).

**MK 455. Marketing Strategy.** (3) Design, implementation, and evaluation of marketing strategy; pragmatic orientation to application of advanced analytical concepts and skills within marketing environment. Emphasis on integration of knowledge from the component areas of marketing into cohesive, well-organized marketing program. Case studies and/or computer games will be used. Prerequisite: 9 hours of marketing including MK 405 and 430 or permission of instructor. Should be taken as close to graduation as possible. (TSU-None) (UTN-MK 4710).

**MK 460. Introduction to Transportation.** (3) Economic, social, and political aspects on national transportation system; economic characteristics of modes of transport; regulatory problems. (TSU-MK 341) (UTN-TRANS 3110).

**MK 465. Business Logistics.** (3) Introduction to management of physical distribution and supply systems; consideration of design concepts; cost determinants, firm and environmental constraints. A critical examination of the managerial aspects of the logistics function. Prerequisite: MK 302, QM 202. (TSU-None) (UTN-None).

**MK 470. Traffic Management.** (3) Concepts and problems of freight traffic management ratemaking theories, rate and classification systems. Prerequisite: MK 460. (TSU-None) (UTN-TRANS 3120).

**MK 475. Transportation Rates.** (3) Analysis of current railroad motor carrier tariffs, classification systems, rate systems. Prerequisite: MK 460. (TSU-None) (UTN-None).

## OFFICE MANAGEMENT (OM)

**OM 121-122. Beginning and Intermediate Typewriting.** (3-3) A study and development of the basic typewriting skills. Students who have had typewriting should not register for the first course; they will be placed according to performance level. (TSU OA 121-122) (UTN-OA 2110-2120, 2130).

**OM 201. Machine Shorthand I.** (3) This course is designed to teach the basic theory of machine shorthand and to develop basic dictation and transcription abilities.

**OM 202. Machine Shorthand II.** (3) This course continues to teach the theory of shorthand machines and to build transcription skills. Prerequisite: Machine Shorthand I (or its equivalent).

**OM 203. Machine Shorthand III.** (3) This course is designed to further improve students' ability to take dictation and transcribe mailable copy with emphasis on skill necessary to meet occupational standards. Prerequisite: Machine Shorthand II (or its equivalent).

**OM 207-208. Beginning and Intermediate Shorthand.** (3-3) Development of an understanding of the basic principles of shorthand and the ability to apply these principles to an extensive short writing vocabulary and acquirement of basic transcription skills. (TSU OA 207-208) (UTN OA 4410-4420).

**OM 210. Introduction to Law and the Tennessee Legal System.** (3) An introduction to legal nomenclature and legal thinking; a study of document drafting through actual preparation of legal memoranda; special emphasis on the court system of Tennessee. Designed to serve as prerequisite to other office administration legal courses. (TSU-None) (UTN OA 2210).

**OM 215. Data Processing for Office Administration.** (3) This course is designed to familiarize the student with the equipment and procedures of processing data in the office. Four-year students may not use this course to satisfy business co-requirements.

**OM 221. Production Typewriting.** (3) Sustained production of professional business papers and communications using simulated office materials; and the development of higher typewriting speeds. Prerequisite: OM 122 (TSU-OA 221) (UTN OA 2140).



**OM 230. Techniques of Legal Practice I: Tort Claims and Workmen's Compensation. (3)** Trial preparation of tort claims and workmen's compensation. Specialized training in actual preparation of legal documents and file maintenance. Includes complaints, interrogatories, deposition, medical records, third-party practice, and settlements. (Prerequisite: Introduction to Law and the Tennessee Legal System (TSU-None) (UTN OA 2230)).

**OM 240. Techniques of Legal Practice II: Real Property and Estate Administration. (3)** The law and practices of real property, including drafting of common conveyances. A study of the more common forms of testamentary instruments including estate administration. (Prerequisite: Introduction to Law and the Tennessee Legal System). (TSU-None) (UTN OA 2240).

**OM 307. Advanced Shorthand. (3)** Increased proficiency in sustained production of mailable transcripts; and development of skills for the transcription of legal, medical, and technical materials. (Prerequisite: OM 207-208). (TSU OA 307) (UTN OA 4410-4420).

**OM 330. Executive Office Systems and Machines. (4)** An integrated sequence emphasizing scientific development analysis, and control of business information systems; routines for handling correspondence, internal and external communications; office machines; reprographics; records management, and word processing. (Prerequisite: Junior Standing) (TSU OA 330) (UTN OA 4520-4557).

**OM 430. Administrative Office Management. (3)** Systems methods, and procedures for efficient office management. (Prerequisite: Junior Standing) (TSU OA 430) (UTN OA 4540).

**OM 441-442. Office Internship. (3-3).** Designed to provide opportunity for full-time supervised work experience for students who have not had appropriate full-time employment. Student may enroll for three or six hours credit. Theory and reading assignments complement work experience. Evaluation of University and work supervisors required at the end of course. By consent of advisor. (TSU OA 441-442) (UTN-None).

## QUANTITATIVE METHODS

**QM 201. Introduction to Statistical Analysis I. (3)** Elementary statistical techniques with emphasis on applications to business problems. Topics covered include: descriptive statistics, probability, random variation, probability distributions, and statistical inference. Prerequisite: Math 113. (TSU-MS 311) (UTN-STAT 2201).

**QM 202. Introduction to Statistical Analysis II. (3)** A continuation of QM 201. Topics covered include: linear regression and correlation, multiple regression, the analysis of variance, elements of time series analysis, forecasting models, and survey sampling. Prerequisite: QM 201. (TSU-None) (UTN-STAT 2202).

**QM 300. Introduction to Quantitative Methods. (3)** An introduction to quantitative methods of the management scientist with applications to economic and industrial problems. The course is designed to introduce the student to the use of mathematics, statistics, economics,

and accounting as tools in managerial decision making. Prerequisite: QM 202 and EC 212. (Same as Management 304). (TSU-None) (UTN-IM 3220).

**QM301. Analysis of Time Series. (3)** Statistical methods applicable to analysis of trends and time series; graphic presentation and analysis. Index numbers, curve fitting, correlation, trend analysis, seasonal and cyclical variation. Prerequisite: QM 202. (TSU-None) (UTN-STAT 3220).

**QM 401. Applied Regression Analysis. (3)** Survey in simple and multiple regression techniques with special applications for students of business and economics. Topics covered include: linear regression with one independent variable, inference in regression analysis, aptness of model and remedial measures, multiple and polynomial regression. Prerequisite: QM 202. (TSU-None) (UTN-STAT 4310).

## REAL ESTATE AND URBAN DEVELOPMENT (RE)

**RE 313. Principles of Real Estate and Urban Development. (3)** Introduction to the social, economic, financial, and legal systems and processes involved in the development and use of real property. A survey of Real Estate Brokerage, Finance, Appraisal, Management, Law, Investment Principles. (TSU-BA 425) (UTN-RE 3610).

**RE 320. Urban Land Resource Analysis. (3)** A survey of the changing patterns of urban development and processes of urban growth. An examination of the structure of the real estate market, characteristics of land resources, location and analysis, and the importance of urban land economics in public and private land use decisions. (TSU-None) (UTN-RE 3310).

**RE 330. Real Estate Finance. (3)** Institutional and governmental funds for financing real estate transactions. Legal instruments of finance, flow of mortgage funds into local markets, and financial packaging of real estate transactions. Prerequisite: RE 313. (TSU-None) (UTN-RE 3640).

**RE 340. Real Estate Law. (3)** The legal environment of real estate. Emphasis on real property law, contract law, law of agency, brokerage, license law and mortgage law. Prerequisite: RE 313. (TSU-None) (UTN-RE 3620).

**RE 350. Real Estate Appraisals. (3)** Economic theories of value applied to real estate; valuation methods, analysis of evidences of values; appraising residential properties. Prerequisite: RE 313. (TSU-None) (UTN-RE 4110).

**RE 410. Urban Planning and Public Policy. (3)** Processes of land uses regulations including the organization of public planning, planning methodology, zoning, subdivision regulations and other governmental impacts on real estate. Prerequisite: RE 313. (TSU-None) (UTN-RE 3440).

**RE 420. Development of Residential and Commercial Real Estate. (3)** The process of developing single-family subdivisions, multi-family housing projects, office buildings, shopping centers, recreational facilities and indus-

trial parks; included are market analysis, legal constraints, site selection, financial analysis, design and construction procedures and marketing methods, case studies. Prerequisite: 9 hours of real estate or consent of instructor. Prerequisite: RE 313 and 330. (TSU-None) (UTN-4130, 4210).

**RE 430. Income Property Appraisal. (3)** Financial theories and methodologies used in estimating the value of income producing properties, i.e., apartments, office buildings, and shopping centers. Prerequisite: RE 313. (TSU-None) (UTN-RE 4140, 4150).

**RE 440. Real Estate Investment Analysis. (3)** Analysis of real estate equity, ownership including sole proprietorship, partnership, limited partnership, real estate investment trusts, subchapter S and public real estate securities. Computer-assisted analysis of federal income taxation on investment, development, equity yields and risks. Prerequisite: 6 hours of Finance, Economics, Accounting, consent of instructor, and 9 hours of Real Estate. (TSU-None) (UTN-RE 4120).

**RE 499. Independent Study in Business. (3)** This course allows the outstanding student to investigate, in depth, approved business topics of the student's choice. Individual studies will be coordinated by a senior member of the departmental faculty. Prerequisite: Permission of the Department Chairperson. (TSU-None) (UTN-None).





# THE SCHOOL OF EDUCATION

Everette L. Witherspoon, Ed.D., Interim Dean  
 Darlene H. Huddleston, Ed.D., Associate Dean  
 Richard O. Renfro, Ed.D., Assistant Dean

## PURPOSES OF THE SCHOOL OF EDUCATION

The basic purpose of the School of Education is to offer professional courses and experiences for prospective and in-service elementary and secondary teachers, counselors, supervisors and administrators.

In realizing this purpose, the School of Education seeks to prepare individuals to take their places as competent members of the teaching profession and to provide opportunities for advanced study for school personnel already established in the profession.

The professional teacher education programs are, for the most part, administered and supervised by the School of Education. The School of Education and the Graduate School cooperate with the graduate teacher education programs.

In addition to its basic purpose, the School of Education also seeks to prepare persons for human services careers through programs in psychology and recreation. Consequently, the objectives of the School of Education are:

1. To prepare elementary and secondary teachers, counselors, supervisors, administrators and school psychologists.
2. To provide opportunities for students to pursue research in the problems of education.

3. To assist graduates in finding teaching and other positions for which they are qualified and in advancing to better positions after they have had experience in their profession.
4. To provide students with opportunities for knowledge and understanding of the society in which they live and their relation and responsibility in such a society.
5. To provide a sound program of guidance and to work cooperatively with the other departments and schools of the university in implementing the program.
6. To offer basic and advanced courses, laboratory and other experiences designed to give students a knowledge and understanding of the data, theories and methods of psychology.

In keeping with the basic purpose, the professional education component provided by the School of Education is designed to develop the competencies necessary for beginning teachers, which are:

1. To develop knowledge and understanding of the principles and process of human growth, development and learning, and the practical application of this knowledge to teaching all children.
2. To develop an understanding of instructional methods, materials and media as they apply to facilitating learning in the student's field of specialization.

3. To utilize materials, methods and resources in order to plan and teach effectively and to work ethically and constructively with pupils, teachers, administrators and parents.
4. To develop an understanding of the historical, philosophical and social foundations underlying the development and practices of public education in this country.
5. To develop an understanding of the purposes, organization, administration and operation of the total educational program of the school.
6. To develop an understanding of the total instructional process through planned field based experiences which involve direct observation and participation in teaching under supervision.
7. To develop instructional skills and strategies through a wide range of laboratory, clinical and student teaching experience.
8. To provide experiences designed to enable the student to utilize and apply psychological data and evaluation procedures in measuring the progress of students.

## Organization

The School of Education is composed of five (5) departments. It is organized as follows: The Department of Educational Administration, the Department of Curriculum and Instruction, the Department of Health, Physical Education and Recreation, the Department of Psychology, and the Department of Reading and Special Education.

The School of Education has established, through cooperative agreements, student teaching centers in the School system of Metropolitan-Nashville-Davidson County. Other school systems in the State of Tennessee also assist with the student teaching program.

## Public Services

Throughout the year the School of Education receives requests for services from local, county, and state agencies. In an effort to meet these requests, the following services are provided: (1) cooperation with the state in-service program in conducting short courses and summer work-conferences, (2) consultative services on local problems to school personnel through the State by university staff members, (3) development and distribution of material to school personnel, and (4) cooperation with the State Department of Education in the administration of the State-wide Testing Program, and (5) delivery of sponsored programs through the Center for Training and Technical Assistance.



### Office of Pre-Service Field Experiences

The School of Education also provides pre-service field experiences in order to afford opportunities for students to correlate theoretical information with real life situations through observations, one to one and small group participation; and finally, student teaching. The Office of Pre-Service Field Experiences accepts placement requests for these field based activities from teacher education faculty and students for the purpose of making appropriate placements. Upon approval of each request, including applications for student teaching, these data are submitted to the Office of Pre-Service Education of the Metropolitan Nashville Public School System for further processing and final placement.

### Curriculum Laboratory

The Curriculum Laboratory is a center for instructional materials in teacher education. It is designed for students and teachers in the professional core courses in education, the specialized professional courses, student teaching and the required activities related to student teaching. The laboratory is located in Room 208 in the Education Building.

### Learning Resources Reading Center

The Learning Resources Reading Center administered by the School of Education serves as a laboratory for students who wish to improve their reading skills and habits. This center also serves as a resource center for the study of the teaching of reading.

## DEPARTMENT OF CURRICULUM AND INSTRUCTION

**Gretchen B. Payne,  
Ed.D., Head**

The Department of Curriculum and Instruction is designed primarily for the education of teachers. It offers an undergraduate major in Elementary Education and a general major in education for preparing secondary teachers of General Science or Social Studies. A minor program is also offered in Library Science.

The program of teacher education includes two broad areas of study: The General Education Programs and the Professional Education Programs.

The General Education Programs, required of all departments offering a teacher education program is described in

the general "Academic Information" section of this catalog. The Professional Education core is presented below.

### PROFESSIONAL EDUCATION

The basic pattern of professional education needed for teaching has certain common elements which apply to problems which all teachers face irrespective of the age level of the pupils who are under their supervision. In addition, preparation for teaching on the different educational levels and in various curriculum areas requires specialized training appropriate to the different areas.

The basic pattern of professional education, therefore included (1) core professional courses required of all persons in teacher education and (2) specialized professional courses appropriate to the different areas.

### CORE PROFESSIONAL REQUIREMENTS

In planning the core professional program attention was given to those areas of study which are considered essential to the development of those understandings and competencies needed by all teachers.

These areas include:

1. Orientation to the teaching profession: Historical, Philosophical, and Sociological Foundations of American Education.
2. Human Growth and Development, and the Psychology of Learning, including an understanding of how children grow physically, emotionally, and mentally, the nurture necessary for wholesome growth, and the relation between growth and acquiring of learning new behavior patterns.
3. Understanding of School Organization, Administration, and Management, and the relationship of the school to the total community.
4. Techniques of Measurement, Evaluation and Classroom Guidance.
5. Skill in Curriculum Development.

### PROFESSIONAL EDUCATION CORE REQUIREMENTS

The following courses are required of all persons enrolled in the teacher education program.

EdCI 101—Orientation

EdCI 201—History & Foundation of Education

EdCI 301—School Organization, Administration, Management and Community Relations

EdCI 387—Curriculum Development

EdSE 465—Introduction to Special Education

PSY. 242—Educational Psychology, Human Development and Psychology of Learning

PSY. 312—Measurement, Evaluation and Guidance for Classroom Teachers

### SPECIALIZED PROFESSIONAL EDUCATION REQUIREMENTS

The specialized professional education requirements vary according to the area of grades in which one seeks certification.

The specialized requirements, adapted to grades 1-8 or grades 7-12, include:

1. Materials and methods of teaching appropriate to the level of certification, including reading methodology.
2. Knowledge and understanding of learning behavioral characteristics of handicapped children.
3. Supervised student teaching appropriate to an area of endorsement.
4. These specialized requirements are outlined under the areas to which they apply.

### CURRICULUM IN ELEMENTARY EDUCATION

Elementary education is one of the curricula in the Department of Curriculum and Instruction set up by the University as its agency for the professional preparation of teachers in the field of elementary education. The Bachelor of Science degree is awarded upon the satisfactory completion of this curriculum. Those who complete this program are qualified for State Teacher certification in elementary education.

### GENERAL REQUIREMENTS FOR THE BACHELOR'S DEGREE IN ELEMENTARY EDUCATION

All candidates for the Bachelor of Science degree must complete a minimum of 132 semester hours (with a minimum average of 2.0) which includes:

1. The General Core including subject matter concentration (73-76 semester hours)
2. The professional and specialized education core (34 semester hours)
3. The minor area program (minimum 18 semester hours)
4. Electives and/or additional minor area (5-8 semester hours)
5. Senior Project—EDCI 450 (3 semester hours)

### MINOR AREA PROGRAM

A minimum of eighteen (18) hours of 300 and 400 level courses in one or not more than two related academic areas.



Some suggested minors:

- 1. English
- 2. Geography
- 3. Social Studies
- 4. Industrial Arts
- 5. Library Service
- 6. Music
- 7. Special Education
- 8. Reading
- 9. Modern Foreign Language
- 10. Health & Physical Education
- 11. Early Childhood Education
- 12. Business
- 13. Art

RESTRICTED ELECTIVES

Five (5) to eight (8) hours of course work on the 300 and 400 level must be selected. It is strongly recommended that Education 463 and Education 310 be included among the electives.

The curriculum sequence for each year level is presented. Each student is required to secure the approval of his faculty adviser in the Department of Curriculum and Instruction concerning his program of work.

SPECIALIZED PROFESSIONAL EDUCATION REQUIREMENTS FOR ELEMENTARY EDUCATION MAJORS

(Grades 1-8)	Credits
EdCI 472e —Student Teaching in the Elementary Schools	9 Sem. Hrs.
(Includes Seminar and Principles of Teaching)	
EdSE 564 —Introduction to Special Education	
EdRD 424 —Teaching Reading in the Elementary School	4 Sem. Hrs.
EdCI 321 —Teaching Arithmetic in the Elementary School	3 Sem. Hrs.
EdCI 322 —Teaching Language Arts and Social Studies	3 Sem. Hrs.

A minimum grade of "C" must be earned in each of the Specialized Professional courses.

SPECIALIZED PROFESSIONAL EDUCATION REQUIREMENTS FOR THE SECONDARY LEVEL

(grades 7-12)	Credits
EdSE 465 —Introduction to Special Education	3 Sem. Hrs.
EdCI 371 —Methods Course in the Special Subject Area	3 Sem. Hrs.

EdCI 472s —Student Teaching and General Methods on the Secondary School Level	9 Sem. Hrs.
EdRD 491 —Reading and Study in the Secondary School	3 Sem. Hrs.

GENERAL REQUIREMENTS FOR STUDENT TEACHING

- All students desiring to enroll in Student Teaching (472e, or 472s) must meet the following general requirements:
1. Must file applications for Student Teaching ONE SEMESTER prior to the one in which he/she wishes to enroll. They should be submitted to the Office of Pre-Service Field Experiences, Clay Hall, before the LAST SCHOOL DAY IN OCTOBER for Spring Semester Student Teaching; and before the LAST SCHOOL DAY IN FEBRUARY for Fall Semester Student Teaching.
  2. Must be classified as a senior (90 or more semester hours).
  3. Have a scholastic average of at least 2.25 in the teaching field courses with a minimum grade of C in all methods courses.
  4. Meet all courses and classroom observation prerequisites.
  5. Receive certification from health authorities that no serious physical condition detrimental to the welfare of the children exists.
  6. Show evidence of emotional stability.

CURRICULUM FOR MAJOR IN ELEMENTARY EDUCATION

FRESHMAN YEAR	Credit Hours	
	Fall	Spring
Eng 101-102	3	3
Hist 121 or 122	3	
PE or AERO	1	1
Geog 171 or 172	3	
Sci 121-122	3	3
Hea 151	2	
Math 111		4
EdCI 101	1	
Spch 210 or 220		3
Art 133 or Mus 131		2
	16	16

SOPHOMORE YEAR	Credit Hours	
	Fall	Spring
Eng 211-212	3	3
EdCI 201	3	
Hea 307e or Hea 300	2	
PE or AERO	1	1
Hist 201-202	3	3
Psy 242	3	
PE 300		2
Math 211		3
Elective or Minor	3	3
Lib. Sci. 211		3
	18	18

JUNIOR YEAR	Credit Hours	
	Fall	Spring
Mus 301	3	
Sci 301 or 302		3
Elect or Minor	5	3
EdCI 301		3
EdCI 322-323	3	3
EdCI 387	3	
Psy 312	3	
Art 360		3
Eng 320 or Lib Sci 363		3
	17	18





SENIOR YEAR	Credit Hours	
	Fall	Spring
EDCI 472o.....	0	
EDCI 321.....	3	
EDRD 424.....	4	
EDCI 472e.....	9	
EDCI 450.....		3
Elect (EDCI 310 or 463) .....	2	
Elective and/or Minor.....		6
Hist 341 and 342 or GPA 320 .....		3
EDSE 465 .....		3
	18	15

**CURRICULUM FOR A MAJOR IN EDUCATION**  
**(Secondary for Teachers of Social Studies Emphasis)**

FRESHMAN YEAR	Credit Hours	
	Fall	Spring
Eng 101-102.....	3	3
PE or AERO.....	1	1
Hist 201-202.....	3	3
Math 111; EDCI 201.....	4	3
EDCI 101.....	1	
Art 133; Mus 131.....	2	2
Geog 171-172.....	3	3
	17	15

SOPHOMORE YEAR	Credit Hours	
	Fall	Spring
Eng 211-212.....	3	3
Sci 121-122.....	3	3
Psy 242.....	3	
PE or AERO.....	1	1
Hea 151; Soc 211.....	2	3
Psy 201-202.....	3	3
Ec 211-212.....	3	3
	18	16

JUNIOR YEAR	Credit Hours	
	Fall	Spring
EDCI 301; 387.....	3	3
Psy 312; Soc 330.....	3	3
Hist 301-02 or 401-02.....	3	3
GPA 221-222.....	3	3
Soc 320; Psy 341.....	3	3
Electives 300 & 400.....	3	3
	18	18

SENIOR YEAR	Credit Hours	
	Fall	Spring
Electives 300-400.....	9	
EDCI 450.....	3	
EDSE 465.....	3	
EDCI 371.....		3
EDRD 491.....		3
EDRD 472e.....		9
	15	15

TOTAL SEMESTER HOURS—132

**CURRICULUM FOR A MAJOR IN EDUCATION (SECONDARY TEACHERS OF SCIENCE EMPHASIS)**

FRESHMAN YEAR	Credit Hours	
	Fall	Spring
ENG 101-102.....	3	3
PE or AERO.....	1	1
HIST 201-02.....	3	3
MATH 161-62.....	5	5
BIO 111-12.....	4	4
EDCI 101; MUS 131.....	1	2
	17	18

SOPHOMORE YEAR	Credit Hours	
	Fall	Spring
ENG 211-12.....	3	3
EDCI 201; PSY 242.....	3	3
PE or AERO.....	1	1
HEA 151; ART 133.....	2	2
CHEM 121-22.....	4	4
PHYS 211-12.....	4	4
	17	17

JUNIOR YEAR	Credit Hours	
	Fall	Spring
EDCI 301-387.....	3	3
PSY 312, SCI ELECT (SOC 400).....	3	4
BOT 220; BIO 370.....	4	4
SOC SCI ELECT (300-400).....	3	
SCI ELECT (300-400).....		4
ED ELECT (300-400).....	3	
	16	15

SENIOR YEAR	Credit Hours	
	Fall	Spring
EDCI 450.....	3	
EDSE 465.....	3	
CHEM 360.....	3	
ELECT (300-400).....	6	
SCI ELECT (300-400).....	3	
SCI ED 371.....		3
EDRD 491.....		3
EDCI 472s.....		9
	18	15

TOTAL HOURS: 132

**LIBRARY SERVICE**

The Library Service program may be elected as a minor by students taking a major in any department of the institution. The library service curriculum provides training for the following groups: (1) students who wish to prepare for library positions in elementary and secondary schools; (2) students who plan to enter a graduate library school after receiving the bachelor degree; (3) in-service teachers, administrators, and prospective teachers who desire information on library materials related to their teaching needs; (4) students who wish guidance in the use of library resources.

**GROUP I—REQUIREMENTS**

Students pursuing a teacher education program on either the elementary or secondary level may elect library service as a minor as as to qualify for position as school librarians. Library Service 361, 362, 441, 451, and 452 are required for certification as librarians, along with teacher certification. Education 463—Audio-Visual Aids in Education is recommended for students taking library service as a minor.

**GROUP II—REQUIREMENTS**

Students preparing to enter graduate library school for further training should complete all courses offered in the department. Some graduate library schools require two years of college credit in for-

eign languages, while others may waive such requirements altogether, depending upon the kind of library work the student chooses for specialization.

**GROUP III—REQUIREMENTS**

In-service teachers, administrators, and prospective teachers may enroll in library service courses even though they do not plan to complete a minor. It is recommended that they take courses dealing with materials: Library Service 361, 362, and 363.

**GROUP IV—REQUIREMENTS**

Students seeking guidance in the use of library resources should elect Library Service 211 as early as possible in their first two years of academic training.

**COURSES FOR A MINOR IN LIBRARY SERVICE**

Name of Course	Credit Hours
Library Service 362.....	3
Library Service 363.....	3
Library Service 361.....	3
Library Service 441.....	3
Library Service 451.....	3
Library Service 452.....	3

Elective Course	Credit Hours
Library Service 211.....	3
EDCI 463.....	3

**COURSES FOR MINOR IN READING & PROGRAM FOR MINOR IN SPECIAL EDUCATION (FOR AREA OF CURRICULUM & INSTRUCTION)**

**Undergraduate Requirements**

The program in special education may be selected as a minor by students pursuing a major in any area of teacher certification. Students who pursue a State Generic Endorsement in special education must also meet all of the requirements for the initial certification at either the elementary or secondary level.

The program as outlined below qualifies the student for the state generic endorsement in special education.

**Special Education Specialized Courses Semester Hours**

Survey:	
Education of the Exceptional Child, EDSE 0333.....	3
Characteristics and Needs:	
Characteristics and Needs of the Mildly Handicapped and Gifted, EDSE 0336.....	3
Characteristics and Needs of the Severely Handicapped, EDSE 0337.....	3
Educational Procedures:	
*Humanistic Teaching of Exceptional Children, EDSE 0334.....	3



OR

\*Teaching the Severely Handicapped,  
EDSE 0471.....3

Teaching the Mildly Handicapped and  
Gifted, EDSE 0468 .....3

Educational Assessment:

Educational Assessment of Exceptional  
Children, EDSE 0462 .....3

Student Teaching:

\*Practicum in Special Education, EDSE  
0473 .....3

OR

\*Student Teaching of Exceptional Chil-  
dren I, EDSE 0493 .....3

\*\*Reading

Teaching Reading in the Elementary  
School, EDRD 0424 .....4

\*\*Curriculum and Instruction

Teaching Arithmetic in the Elementary  
School, EDCI 0321 .....3

27

Semester Hrs (Equivalent 40 Quarter  
Hours)

\*These courses are restricted  
electives.

\*\*These courses are also required for  
elementary education certification.

**EDSE 465—Introduction to Special Edu-  
cation.** This course is required of all per-  
sons enrolled in the teacher education  
program.

**Persons pursuing the minor or state  
endorsement should enroll in ED.SE.  
0333 instead of ED. SE 0465.**

Persons upgrading their Tennessee State  
University Educable Mentally Retarded  
certification are required to take EDSE  
0462 and EDSE 0468.

A minor, without certification in special  
education, may be completed by taking 18  
semester hours of special education  
courses.

## COURSE DESCRIPTIONS LIBRARY SERVICE (LS)

**LS 211. Use of Library Resources.** (3) A  
general course on the use of library resources  
including the card catalog, periodical indexes,  
bibliographies, encyclopedias, and other refer-  
ence tools. Designed primarily to aid students  
in developing a systematic approach to using  
library materials. A required course for elemen-  
tary education majors, however, it may be taken  
by students from any department. Course does  
not provide credit for certification as a school  
librarian.

**LS 361. Reference Materials.** (3) Embraces  
a study of basic reference books and other  
reference materials particularly for the school  
library or small library. Also includes the organi-  
zation and administration of reference services.

**LS 362. Books and Related Materials for  
Children.** (3) Principles of selection, aids for  
selection, evaluation and use of books and  
related materials for young people and adults.  
Emphasizes reading of books and an examina-  
tion of materials for curriculum needs, reading

interests, and personal growth, and to the de-  
velopment and promotional activities aimed at  
stimulating use of materials by students and  
teachers. Combined with UTN 3520.

**LS 363. Books and Related Materials for  
Children.** (3) Principles of selection aids for  
selection, evaluation and use of books and  
related materials for children. Emphasis placed  
on required readings for acquainting students  
with children's books and writers in the field.  
Attention given to an examination of materials  
for curricular needs, reading interests, and per-  
sonal growth and to the development of promo-  
tional activities aimed at stimulating use of  
materials by students and teachers. Combined  
with UTN 3510.

**LS 441. Classification and Cataloging.**  
(3) Introduction to principles underlying the  
classification and simplified techniques of cata-  
loging books. The abridged Dewey Decimal  
Classification scheme used and printed cards  
stressed. Making the unit cards, filing and other  
essential procedures of organizing the book  
collection are included.

**LS 451. Organizing Library Materials.**  
(3) Emphasizes the organization, selection,  
acquisition, evaluation and use of non-book  
materials in the library program in relation to  
the entire school program. Included are prob-  
lems involved in developing the library as a  
materials center that is responsible for audio-  
visual aids.

**LS 452. School Library Administration.**  
(3) Principles, objectives and procedures in-  
volved in administering the small library. Stan-  
dards and evaluation, housing and equipment,  
personnel, financial support, budgeting, loan  
systems, reports and other administrative pro-  
cedures included. Also includes an introduction  
to the development and function of libraries,  
library work and opportunities in librarianship.

## Course Offerings DEPARTMENT OF CURRICULUM AND INSTRUCTION

**EDCI 201. History and Foundations of Edu-  
cation.** (3) A study of the historical, philo-  
sophical, and sociological foundations of the  
American public schools, with emphasis on the  
traditional function of the American public  
school as a local community institution. Com-  
bined with UTN 3010-3030. Field experience  
required.

**EDCI 301. School Organization, Manage-  
ment and Community Relations.** (3) Deals  
with the general organization, administration  
and management of public schools with special  
attention given to the relationship of the school  
to the local community. Techniques for effective  
use of community resources are also explored.  
Prerequisites: Admission to the Teacher Edu-  
cation Program. Field Experience required. Com-  
bined with UTN 3020.

**EDCI 310. Penmanship.** (2) Develops skill in  
simple letter forms; upper lower case letters  
to facilitate the teaching of reading in the first  
elementary grades for chart making, and chalk-  
board work.

**EDCI 321. Teaching Arithmetic in the  
Elementary School.** (3) An analysis of cur-  
rent methods in teaching arithmetic through  
firsthand experiences, the place of number

meaning, thinking and drill in effective learning.  
Prerequisites: Math 211 and admission to the  
Teacher Education Program. Combined with  
UTN 3350. Course taken with EDRD 424 dur-  
ing the Student Teaching semester. Field ex-  
perience required.

**EDCI 322. Methods of Materials in Language  
Arts.** (3) A consideration of modern technique  
and trends in the teaching of language arts in  
the elementary school. Prerequisites: Admis-  
sion to the Teacher Education Program and  
previously or currently enrolled in Education  
301 or 387. Field experience required. Com-  
bined with UTN 3270 and 3260.

**EDCI 323. Teaching the Social Studies in the  
Elementary School.** (3) Includes a study of  
the objectives, scope, organization, and tech-  
niques of teaching on the elementary level. Pre-  
requisites: Admission to Teacher Education  
Program and previously or currently enrolled in  
Education 322. Field experience required, but  
**cannot** be taken the same semester as Stu-  
dent Teaching.

**EDCI 387. Curriculum Development.** (3) A  
critical study of the reorganization, construc-  
tion, and administration of the school curricu-  
lum in the light of modern educational princi-  
ples and objectives. Prerequisites: Admission  
to Teacher Education Program. Field experi-  
ence required. Combined with UTN 3030.

**EDCI 425. Education Workshop.** (3) This  
course is designed to provide the student with  
opportunities to make an indepth study of one  
area or combination of areas involving contem-  
porary problems and issues in education.

**EDCI 445. Field Study.** (3) Under the gui-  
dance and supervision of trained teachers, the  
students are provided with information,  
teaching techniques and materials relative to  
the particular subject matter area of interest.

**EDCI 450. Senior Project.** (3) Designed to  
give opportunity for students to work individu-  
ally on any problem of their choice in the area of  
elementary education. If a student has com-  
pleted 60 hours of 300 and 400 level courses,  
this may be taken without credit. (Must be  
taken on the Senior level).

**EDCI 463. Audio-Visual Aids in Education.**  
(2) A survey course is designed to acquaint  
the student with audio-visual materials of in-  
struction. Proper classroom utilization of film  
strips, 16mm motion pictures, slides, graphic  
materials, field trips, exhibits, and models are  
studied. Combined with UTN 4750.

**EDCI 470A. Educational Seminar.** (3) A  
study of the foundations and history of educa-  
tion, curriculum development in education  
methods of teaching, and present trends in  
education. Combined with UTN 4630.

**EDCI 470B. Educational Seminar.** (3) A  
study and analysis of the basic course content  
of courses taught in the elementary schools.

**EDCI 472e. Student Teaching in the Elemen-  
tary School.** (9) This course consists of  
directed observations, participation, and  
teaching in the elementary grades. It provides  
opportunities for students to work in typical  
school situations under the guidance of experi-  
enced teachers. Parallel readings and confer-



ences for further interpreting and enriching these experiences are held regularly. This course is open only to seniors and teachers with some experience. Combined with UTN 4810.

**EDCI 472s. Students Teaching in the Secondary Schools, Grades Seven Through Twelve. (9)** Actual classroom experience in secondary schools under the charge of expert teachers in cooperating schools. Student teacher schedules should be arranged well in advance of the senior year and planned so as to enable the student to devote full time to student teaching during the semester in which the course is to be completed. Required for all students who are following the professional education core that leads to teaching as a career. Prerequisites: EDCI 201, Psy. 242, EDCI 301, Psy. 312, EDCI 387, and 371, the Department's specific methods course. Combined with UTN 4710.

**EDCI 490. Multicultural Education. (3)** This course is designed to develop awareness, understanding, and sensitivity to the needs and interest of ethnic and cultural groups. The differences and similarities that characterize individuals and groups should be cherished for their worth and cultivated for the benefits they bring all people.

**EDCI 472-0. Student Teaching Orientation. (0)** This course is designed to prepare the prospective student teacher for the public school classroom and for participation in the student teaching program.

### CURRICULUM AND INSTRUCTIONAL COURSES (Downtown Campus)

**EDCI 100. The Education Environment and Career Choice. (2)** Exploration of occupations based upon analysis of self and occupational requirements; development of commitments to teaching and understanding of teaching learning problems in the classroom (Pass-Fail grades only). UTN 1000.

**EDCI 210-220. Field Study in Education. (2-2)** Problems of teachers in active service in the fields of methods of teaching, curriculum materials, school-community relationships and school organization. UTN 2010-20-30.

**EDCI 351-352. Development Field Experiences for Teaching. (1-1)** Field experiences in which students perform tasks related to teaching and teacher roles. May be taken separately or concurrently by consent of instructor. Must be taken before student teaching. Prerequisite: Admission to teacher education. UTN 3654.

**EDCI 371a. The Teaching of Science Grades 7-12. (3)** Purposes, techniques, materials, and evaluation; directed observation in public schools, preparation of teaching plans and materials. Prerequisite: Admission to teacher education. UTN 3654.

**EDCI 320. Teaching Science in the Elementary School. (3)** Methods and materials. Prerequisite: Admission to Teacher Education UTN 3720.

**EDCI 410. Philosophies of Education in Cultural Perspective. (3)** Education in relation to

the liberal, conservative reactionary and radical currents of thought in American culture. UTN 4110.

**EDCI 426. Philosophies of Education: Introductory Studies. (3)** Truth, knowledge and valuation in relation to the work of the schools. UTN 4260.

**EDCI 371b. The Teaching of Social Studies, Grades 7-12. (3)** Purposes, techniques, materials and evaluation; directed observation in public schools preparation of teaching plans and materials. Prerequisites: Admission to Teacher Education. UTN 3653.

**EDCI 452-53. Problems in Teaching Social Studies. (3)** UTN 4352-62-72.

**EDCI 454-55. Problems in Teaching Science. (3)** UTN 4353-63-73.

**EDCI 456-57. Problems in Teaching Language Arts. (3)** UTN 4354-64-74.

**EDCI 458-59. Problems in Instructional Materials. (3)** UTN 4356-66-76.

**EDCI 461-462. Problems in General Curriculum. (3)** UTN 4355-65-75.

**EDCI 431. Developing the Mathematics Laboratory. (3)** Developing activity-oriented math

**EDCI 311. Classroom Behavior Management (3)** An overview of the major techniques of modifying classroom behavior.

## DEPARTMENT OF EDUCATIONAL ADMINISTRATION FRANKLIN B. JONES, Ed.D., HEAD

The Department of Educational Administration offers instruction designed to prepare individuals for the principalship, supervisory positions and the superintendency. The programs sponsored by the department lead to a degree of Master of Arts in Education, Master of Education, Specialist in Education, or Doctor of Education. The department's courses, seminars, studies, etc., are intended for graduate students. Interested students should see the **Graduate Bulletin** for more detail.

### Description of the Center for Community Education

The Center for Community Education was established in cooperation with the C.S. Mott foundation in July of 1973. The purpose of the Center is to disseminate information about community education and to assist in the development and expansion of such programs in Tennessee. The center provides consultant services, in-

service training programs, and other assistance to communities throughout the State. At the University level, the center is responsible for in-service education, development of seminars and workshops, establishment of training programs in community education, research, public relations, conferences, and other activities which enhance the development of community education. In addition, undergraduate and graduate level courses in Community Education are offered through the School of Education at Tennessee State University.

### COURSE DESCRIPTIONS

**EDAD 300. Utilization of Community Resources. (3)** Exploration of the multitude of existing community resources for learning and how these resources can be most effectively integrated into existing educational programs. Special emphasis on resource identification, recruiting, and screening skills, supervision, evaluation, reward systems for volunteers and training and utilizing non-professionals in a community school setting.

**EDAD 401. Community Education for the Teacher. (3)** Basic introduction to the philosophy of community education and the community school concept with special emphasis on the historical and legal basis for community education, interagency relationships, facilities, community organization, and financing.

**EDAD 402. Problems and Issues in Community Education. (3)** Utilization of a multidisciplinary approach to the analysis of contemporary issues related to the community school. Special emphasis will be given to reviewing recent literature and research in the field. Course format will be influenced by emerging developments in community education, i.e., legislation, evaluation, goal setting, etc. Prerequisite: 401 or consent of instructor.



# DEPARTMENT OF READING AND SPECIAL EDUCATION

**Ruby Martin, Ed.D.,  
Head**

The Department of Reading and Special Education offers undergraduate and graduate instruction in the areas of Reading Education and Special Education. An undergraduate minor, and electives are offered in Reading Education.

An undergraduate minor is also offered in Special Education.

Certification and master's degree programs exist in both areas, and a doctoral degree in Curriculum and Instruction with specialization in Reading is offered.

## COLLEGE LEVEL READING AND STUDY SKILLS

All students are encouraged to take advantage of the college level reading and studying courses. These courses are designed to help students improve their study skills, become more flexible readers, save study time, and to improve their grades in respective academic disciplines.

Students on academic probation and those re-enrolling after academic suspension are strongly urged to enroll in Reading-Studying improvement courses.

Veterans and students with special learning needs are especially encouraged to utilize these services. Adult students who have been away from an academic setting may also find help in rapidly revitalizing their reading-studying skills.

The objective of the developmental reading program is to develop and to improve students' skills in concentration, memory training, test-taking, study skills, comprehension and vocabulary enrichment. Another objective is to increase the retention rate by providing a variety of opportunities for successful academic achievement for all students.

ALL ENTERING FRESHMEN are required to enroll in a reading course if their placement tests scores fall below a minimum level of proficiency. (See section below on University Requirement.)

## UNIVERSITY REQUIREMENT FOR READING

All entering freshmen are required to demonstrate proficiency in reading. These students must take placement tests for reading at the beginning of their first term at the University. Failing to earn passing scores on specified subtests, students are

required to enroll in a developmental reading course until the course requirement has been satisfied. The test scores will be used to identify the course in which the student is to be enrolled.

This requirement does not apply to students who are 21 years and older, international students, nor transfer students who have completed a course comparable to either of those in the curriculum. However, any of such students may enroll in a reading course if he chooses.

## COURSES

EdRD 100—Reading Competence .....(3)  
EdRD 102—Flexibility of Rate and Speed  
of Comprehension .....(3)  
EdRD 100L/102L—Tutorial Laboratory.....  
No Credit

## COURSE CREDIT

Students may take the developmental reading courses either to satisfy the university requirement or as electives. Each course carries three (3) semester hours credit. These credits will be computed into the grade point average. However, these credits may not be used to meet degree requirements.

## TUTORIAL ASSISTANCE

Individualized tutorial assistance is available to all students. It is conducted in a reading laboratory equipped with study carrels designed for independent or individualized practice. An instructor prescribes a personalized skill development program for each student. Most students participate on a voluntary basis in a program planned around class or work schedules.

Students who have failed to meet the course requirement and have received an incomplete grade in a developmental reading course are required to attend tutoring sessions for one semester in order to complete their course requirement and to receive a passing grade.

## READING EDUCATION MINOR AND/OR ELECTIVES

The Reading Education minor is designed to be an interdisciplinary program emphasizing communication—language, reading, reasoning and learning.

Students may select courses in Reading-Language Arts as electives, and those students who wish to establish a stronger support area for majors with emphasis in language or communication skills may select a minor in Reading Education. The Reading Education minor will enhance teacher education programs in addition to Elementary Education and Early Childhood Education. Its interdisciplinary struc-

ture will also support Speech and Theater; Speech Pathology; English Education; Psychology; Sociology and other programs.

Teachers at all levels, K-12, find that much of their time is devoted to teaching their students how to think clearly and creatively, and how to communicate ideas through reading, writing, listening, and speaking. Teachers of all subjects in middle and secondary schools are constantly faced with problems of what to do when their students cannot read the assigned textbook, or cannot write well enough for others to understand.

The minor in Reading Education is designed to provide a high quality program concentrated in the teaching of reading, thinking and other language skills. This program has been designed in accordance with the "Guidelines for the Professional Preparation of Reading Teachers" as recommended by the International Reading Association.

## CURRICULUM FOR READING MINOR

Required Courses: 18 credit hours minimum

\*EdRD 0319 Exploring the Language Learning Process .....(3)  
\*\*  
\*EdRD 0325 Developing Skills and Habits for Effective Reading, Reasoning, Studying (Replaces EdRD 0491) (3)  
\*\*  
\*EdRD 0345 Methods and Materials for Reading Instruction .....(3)  
\*EdRD 0446 Diagnostic Teaching of Reading-Language Arts (Replaces EdRD 0474) (3)  
\*\*  
EdRD 0482 Teaching Reading-Language Arts to Exceptional Learners .....(3)  
EdRD 0487 Techniques for Integrating Reading-Language Arts Instruction (Replaces EdRD 0475) .....(3)  
EdRD 0495 Practicum in Individualizing Reading-Language Arts Instruction (Replaces EdRD 0477) .....(3)

\*Courses required for Early Childhood and Elementary Education Majors who minor in reading. EdRD 0424 (formerly 0324) is no longer a requirement for reading minor. This minor allows for one elective chosen from the approved list.

\*\*Courses required for all other majors who minor in reading. This minor allows for three electives chosen from the approved list or alternative approved by head of the department.



**SUGGESTED ELECTIVES FOR A MINOR IN READING EDUCATION**

Students may select 1 to 3 elective courses from the following for 18 hours. The purpose for this interdisciplinary minor is to broaden support for major areas of study. It is recommended that students not select courses as electives in their major area.

**AREA A:** For persons majoring in Elementary Education or Early Childhood Education

SPTH 471	Language Development in Child (3)
SPCH 449	Speech & Theater for the Elementary Child (3)
SPCH 280	Introduction to Speech, Hearing and Language Disorders (3)
SPTH 260	Phonetics (3)
SPTH 354	Oral Interpretation (3)
Eng 413	Advanced English Grammar (3)
Eng 311	Creative Writing (Short Story) 3
Eng 312	Creative Writing (Poetry) (3)
Soc 430	Soc. of Child Development OR (3)
CDFR 201	Principles and Concepts of Child Development OR (3)
Psy 351	Developmental Psychology of Child Development (3)
CDFR 332	Creative Arts for Young Children (3)
ANTH 380	Language and Culture (3)
Phil 250	Logic and Critical Thinking (3)
EdSE 333	Education of the Exceptional Child (3)

**Area B:** For prospective teachers, grades 4-12, or other persons serving students at these levels.

EdRd 325	Developing Skills and Habits for Effective Reading, Reasoning, and Studying OR (3)
SPCH 420	Small Group Communications (3)
Phil 250	Logic and Critical Thinking (3)
SPCH 430	Psychology of Speech Communication (3)
SPCH 354	Oral Interpretation (3)
Eng 372	Adolescent Literature (3)
Eng 413	Advanced English Grammar (3)
LS 362	Books & Related Materials for Young People (3)
EdSE 333	Education of the Exceptional Child (3)
ANTH 380	Language and Culture (3)

**Area C:** For persons desiring to extend awareness to language and Culture

EdRD 482	Teaching Reading-Language Arts to Exceptional Learners, K-12 (3)
EdCI 490	Multicultural Education (3)
Spth 471	Language and Speech Development for Children (3)
ANTH 380	Language and Culture (3)
Area D: For persons majoring in Speech Pathology and Audiology	
EdRD 446	Diagnostic teaching of Reading-Language Arts (3)
EdRD 495	Practicum in Individualizing Reading-Language Arts Instruction (3)
EdRD 487	Techniques for Integrating Reading & the Other Language Arts Instruction
EdRD 491	Teaching Reading & Studying in Secondary Schools (3)
CDFR 201	Principles and Concepts of Child Development (3)
Psy 351	Developmental; Psychology of Child Development (3)
ANTH 380	Language and Culture (3)
Phil 250	Logic and Critical Thinking (3)
EdSE 333	Education of the Exceptional Child (3)

**COURSE DESCRIPTIONS**

**EdRd 100. Reading Competence. (3)** This course is designed as an experience in reception and processing of ideas for improvement of learning in the various disciplines. Efficiency in the use of study skills, reading in the content areas, and flexibility in reading rate will be stressed.  
NOTE: Based on test scores and on recommendation of advisor or department head, this course may be a prerequisite to minoring in reading.

**EdRd 102. Flexibility of Rate and Speed of Comprehension. (3)** This course is designed to provide experiences to help the student increase his capacity to adjust his study skills and reading flexibility.

**EdRd 100L/102L. Tutorial Laboratory. (0)** Individual diagnosis, counseling or independent study centered around reading skills, test-taking, study techniques, etc. Application of reading skills to content-area course subject-matter and materials. Skill development through instructional modules.

**EdRd 0319. Exploring the Language Learning Process. (3)** This course covers current theory concerning the nature of reading, language, and learning as well as an overview of school reading-language arts programs.

**EdRd 0325. Developing Skills and Habits for Effective Reading, Reasoning, and Studying. (3)** This course emphasizes ways for improving critical reading skills and advanced methods for studying. Pupils develop their ability to evaluate ideas gained by reading,

and they develop problem solving—reasoning strategies with valid logic. This course is an alternative for the blocked EdRd 0291.

**EdRd 0345. Methods and Materials for Reading Instruction. (3)** This course emphasizes major methods for developmental reading instruction, as well as materials and techniques for personalizing reading-language arts and motivating readers.

**EdRd 0424. Teaching Reading in the Elementary School. (4)** This course includes methods, materials and modern practices and trends in the teaching of reading at the elementary school level. (Required only for students pursuing teacher certification in grades K-9 or K-12.

**EdRd 0446. Diagnostic Teaching of Reading—Language Arts. (3)** This course emphasizes techniques for determining learners' strengths and weaknesses in reading—language arts across all levels with practice in creating diagnostically based teaching techniques (Replaces EdRd 0474)

**EdRd 0482. Teaching Reading—Language Arts to Exceptional Learners. (3)** Language characteristics and the special reading—language arts needs attendant with the exceptional learner. Focuses on linguistically different students, and on students who deviate from the average or norm in intellectual, social, physical, emotional, sensory or communication abilities. Designed especially for the regular class teacher.

**EdRd 0487. Techniques for Integrating Reading-Language Arts Instruction. (3)** This course explores a rationale (theory and principles) for integrating reading and language arts; its goals and objectives; basic processes; and a (flexible) curriculum design for the basic and developmental skills, assessment and treatment procedures. (Replaces EdRd 0475)

**EdRd 0491. Reading and Study in Secondary Schools. (3)** For all subject matter teachers. Teaching strategies, designs, and materials for teaching comprehension, advanced study skills, and vocabulary; formal and informal teaching, pupil abilities and interests. (Required only for students pursuing teacher certification 7-12; for students not minoring in Reading.)

**EdRd 0495. Practicum in Individualizing Reading-Language Arts Instruction. (3)** This course is designed as a field-based experience in hands-on work diagnosing, and individualizing, and evaluating instruction for groups of children with reading-language arts deficiencies. (Replaces EdRd 0477)

**PROGRAM FOR A MINOR IN SPECIAL EDUCATION UNDERGRADUATE MINOR REQUIREMENTS**

The program in special education may be selected as a minor by students pursuing a major in any area of teacher certification. Students who pursue a State Generic Endorsement in special education must



also meet all of the requirements for the initial certification at either the elementary or secondary level.

The program as outlined below qualifies the student for a state generic endorsement in special education.

### Special Education Specialized Courses Semester Hours

#### Survey:

Education of the Exceptional Child,  
EDSE 0333 .....3

#### Characteristics and Needs:

Characteristics and Needs of the  
Mildly Handicapped and Gifted,  
EDSE 0336 .....3  
Characteristics and Needs of the  
Severely Handicapped,  
EDSE 0337 .....3

#### Educational Procedures:

\*Humanistic Teaching of Exceptional  
Children, EDSE 0334 .....3  
OR  
\*Teaching the Severely Handicapped,  
EDSE 0471 .....3  
Teaching the Mildly Handicapped and  
Gifted, EDSE 0468 .....3

#### Educational Assessment:

Educational Assessment of Exceptional  
Children, EDSE 0462 .....3

#### Student Teaching:

\*Practicum in Special Education,  
EDSE 0473 .....3  
OR  
\*Student Teaching of Exceptional Chil-  
dren I, EDSE 0493 .....3

#### \*\*Reading

Teaching Reading in the Elementary  
School, EDRD 0324 .....3

#### \*\*Curriculum and Instruction

Teaching Arithmetic in the Elementary  
School, EDCI 0321 .....3

27

Semester Hours  
(Equivalent to 40  
Quarter Hours)

\*These courses are restricted electives.

\*\*These courses are also required for  
elementary education certification.

EdSE 465 Introduction to Special Educa-  
tion. This course is required of all persons  
enrolled in the teacher education pro-  
gram. **Persons pursuing the minor or  
state endorsement should enroll in  
EdSE 0333 instead of EdSE 0465.**

Persons upgrading their Tennessee State  
University Educable Mentally Retarded  
certification are required to take EDSE  
0462 and EDSE 0468.

A minor, without certification in special  
education, may be completed by taking 18  
semester hours of special education  
courses.

## COURSE DESCRIPTIONS SPECIAL EDUCATION (EDSE)

**EDSE 205. Parenting Exceptional Children.** (3) A survey of categories of exceptionality, special needs of exceptional families, commu-  
nity resources, and child advocacy; methods for  
communicating with parents of exceptional chil-  
dren.

**EDSE 230. Manual Communication.** (3) De-  
velops competence in fingerspelling, basic  
signing, and conversational skills; introduces  
advanced techniques.

**EDSE 333. Educational Of The Exceptional  
Child.** (3) Principles, characteristics, and spe-  
cial needs; local and state programs for diagno-  
sis and care; educational provisions in regular  
or special classes; home teaching, social and  
vocational guidance.

**EDSE 334. Humanistic Teaching of Excep-  
tional Children.** (3) Development insights  
into causes of children's problems; using com-  
munication skills to solve conflict situations;  
employing democratic methods to manage chil-  
dren; clarifying values; expressing emotion; the  
teacher as group facilitator.

**EDSE 336. Characteristics And Needs of the  
Mildly Handicapped and Gifted.** (3) Char-  
acteristics and needs of children who: (1) ex-  
perience learning problems resulting from  
mental retardation, emotional disturbance,  
learning disability, or unidentifiable causes, (2)  
are physically handicapped, including visual  
and auditory impairments, and (3) are gifted.  
(Prerequisite 333 or 465).

**EDSE 337. Characteristics and Needs of the  
Severely Handicapped.** (3) Characteristics  
of moderately, severely, and profoundly dis-  
abled, and/or multiply handicapped individuals  
from ages three to twenty-one are included in  
this course. Discussion of needs includes func-  
tional living skills (dressing, feeding, toileting,  
mobility, communication) as well as utilization  
of specialty personnel.

**EDSE 340. Career Education for the Handi-  
capped.** (3) Procedures and curricula to fa-  
cilitate success in a vocation and in home,  
school, community, and interpersonal relations.

**EDSE 406. Characteristics and Needs of  
Emotionally Disturbed Children.** (3) Char-  
acteristics, degrees of severity, possible causes  
and groups of causes; relationships among  
personality, developmental factors, behavior  
problems may be considered.

**EDSE 407. Teaching the Emotionally Dis-  
turbed.** (3) Needs and educational proce-  
dures; methods and materials for special and  
regular classes; treatment models and per-  
spectives.

**EDSE 411. Characteristics and Needs of  
Mentally Retarded Children.** (3) Character-  
istics, degrees of severity, identification, de-  
scription, possible causes, and needs of the  
family.

**EDSE 412. Teaching the Mentally Retarded.**  
(3) Needs and educational procedures;  
methods and materials for special and regular  
classes.

**EDSE 413. Education of the Learning Dis-  
abled Children.** (3) Needs and educational  
procedures; methods and materials for special  
and regular classes; treatment models and  
perspectives.

**EDSE 420. Characteristics and Needs of  
Hearing Impaired Child.** (3) Characteristics,  
needs, educational procedures, and possible  
causes; treatment models and perspectives.

**EDSE 430. Communication Processes for  
the Hearing Impaired.** (3) Speech and lan-  
guage development, auditory training, speech-  
reading, treatment models and perspectives,  
observation and practicum. (Prerequisite 230).

**EDSE 435, 436, 437. Problems in the Educa-  
tion of Exceptional Children.** (3,3,3) Indi-  
vidualized study. Consent of instructor.

**EDSE 438. Practicum in Varying Exception-  
alities.** (3) Field experiences with mildly dis-  
abled, severely disabled, and gifted children.

**EDSE 460. Nature of the Learning Disabled  
Child.** (3) Characteristics, identification and  
diagnosis, relationships to other disabling con-  
ditions, issues, and trends.

**EDSE 462. Educational Assessment of Ex-  
ceptional Children.** (3) Administration and  
interpretation of various educational, cognitive,  
and social assessment instruments. Prescrip-  
tive teaching strategies and behavior manage-  
ment techniques will be developed based on  
assessment results, and IEP's will be written.  
Observation and practical experience are re-  
quired. (Prerequisites 333 or 465; 334 and  
335).

**EDSE 465. Introduction to Special Educa-  
tion.** (3) Designed to acquaint the student  
with the general field of special education—its  
purpose and scope. Offered each semester.

**EDSE 468. Teaching the Mildly Handicapped  
and Gifted.** (3) Developing individual educa-  
tion programs (I.E.P.s), social and personal  
skills or vocational preparation and alternative  
approaches including various forms of enrich-  
ment for the gifted; field-based experience.  
Prerequisites: Ed. S.E. 333, or 465; 336 and  
462.

**EDSE 469. Vocational Guidance and Occu-  
pational Placement for the Mentally Re-  
tarded.** (2) This course is designed to pro-  
mote occupational competency for the mentally  
retarded secondary pupil through efficient vo-  
cational guidance. (Prerequisite Ed. 465 or  
333).

**EDSE 471. Teaching the Severely Handi-  
capped.** Developing functional and daily liv-  
ing skills for the profoundly to moderately  
handicapped; stimulation development and in-  
tegration of sensory-motor perceptual com-  
municative skills, and self-help abilities; field-  
based experience. (Prerequisites: Ed.S.E. 333  
or 465, 462 and 337).

**EDSE 473. Practicum in Special Education.**  
(3) A practicum in actual classroom situa-  
tions, guiding the learning experiences of ex-  
ceptional children. Frequent conferences and  
reference readings will aid in the interpretation  
and solution of existing problems, as well as  
improving teacher-learning situations. Students



must have completed the sequence of courses listed in the specialized area. (Prerequisites 333 or 465; 334, 335, and 452; 336 or 471).

**EDSE 493, 494. Student Teaching of Exceptional Children I and II.** (3,3) Observation and supervised practicum with exceptional children. (Prerequisites 333 or 465; 334, 335, and 452; 336 or 471.)

**EDSE 450. Characteristics and Needs of Speech and Language Impaired Children.** (3) Characteristics, needs and causes of speech and language problems in the exceptional child.

**EDSE 451. Teaching Speech and Language Impaired Children.** (3) Educational procedures, treatment models and perspectives, and field-based experience. (Prerequisite EDSE 450).

**DEPARTMENT OF  
HEALTH, PHYSICAL  
EDUCATION AND  
RECREATION**  
**Audrey Lewis, Ed.D.,  
Head**

The Department of Health, Physical Education and Recreation serves all students in the University by contributing to their health, organic vigor and assisting in the development of desirable mental and physical habits that will improve their quality of life as they pursue their goals.

The Departmental objectives are:

1. To provide instruction to all students and/or develop appreciation for a variety of physical activities for a two-fold purpose: (a) development of physical skills and achievement of a balance in the demands of college life, (b) knowledge and appreciation of leisure time activities for immediate and later use.
2. To provide health instruction to all students so that they may be knowledgeable as health consumers and improve the quality of life for all.
3. To prepare prospective teachers in the areas of health instruction and physical education in addition to preparing the physical education professional with the necessary skills for athletic coaching responsibilities.
4. To prepare recreation specialists for positions as leaders and/or directors in public and/or private agencies.
5. To provide graduate studies in recreation to enable qualified persons to assume administrative and supervisory positions in the field of professional recreation services. (See Graduate Bulletin).
6. To provide advanced studies in health and physical education to meet high standards in the teaching profession

- and advancement in the respective fields. (See Graduate Bulletin).
7. To provide intramural and recreational activities for all students.
  8. To provide leadership and services to the University and the community in the areas of health instruction, physical education and recreation.

**PHYSICAL EDUCATION ACTIVITY COURSES.** Designed for all students to meet University Requirements for Bachelor's degree. Course offerings are PE 11 through PE 94-1.0 credit each.

**PE 11—Body Conditioning and Group Games and PE 12b—Elementary Swimming** are required courses for the Freshman year. (One Course Per Semester). The four semester requirements must be completed prior to Junior year.

\*Note option regulation in Academic Information Section of the Catalog.

Select any two other courses from PE 15 through PE 44 as offered for selection (one course per semester).

Students who require limited physical activity because of a physical disability should enroll in PE 91 through PE 94 to complete the requirements. A medical statement must be filed with Department attesting to the physical disability for permission to enroll and continue in the course. Enroll in one course per semester—1.0 hour credit.

**MINORS for HEALTH, PHYSICAL EDUCATION AND RECREATION**

**Physical Education**

- HPED 101  
Hea 306  
PE Dance  
Fund & Tech Sports  
IPE 331  
PE 334  
PE 403

- Orientation .....2  
First Aid and Prevention of Injuries.....2  
PE 222A-B or PE 227 .....2  
PE 201-214 .....4  
Measurement and Evaluation PE .....3  
History and Philosophy of PE .....3  
Physical Education for Atypical .....2

18 cr. hrs.

**Health Instruction**

- HPED 101  
Hea 300  
Hea 303  
Hea 305  
Hea 306  
PE 312  
Ntr 312  
Micro 250

- Orientation .....2  
School Health Program .....2  
Environmental Sanitation.....2  
Family Health.....2  
First Aid and Prevent of Injuries .....2  
General Anatomy .....2  
Nutrition for Teachers.....3  
Prin of General Bacteria .....3

18 cr. hrs.

**Recreation**

- HPED 101  
Fund and Tech  
PE 300 or Rec 304  
PE 434  
Rec 303  
Rec 353  
Art

- Orientation .....2  
Dance and/or Sports and/or Aquatics .....2  
Play and Lead-Up Games or Rec for Handicap .....2  
Planning Special Events & Demonstrations .....2  
Camping .....2  
Leadership Principles.....2  
(2 courses 300-400 level).....6

18 cr. hrs.

**INTRAMURALS**

Intramurals and Recreational Activities are part of the responsibilities of the Health, Physical Education and Recreation Department. Schedule of activities are posted each semester and all students at the University are encouraged to participate.

**AWARDS**

The Department of Health, Physical Education and Recreation offers two awards: HPER Junior-Senior HPERMOTS and Faculty Award and the Lua S. Bartley Award. Majors in HPER with high grade point averages and involved in school activities may secure information from the Department.

**DEGREE PROGRAMS**

The Department offers six (6) undergraduate curricula leading to a Bachelor of Science degree and two (2) Master's of Science. (See Graduate Catalog).

Four undergraduate curricula meet certification requirements. Health Instruction, Physical Education Elementary, Physical Education Secondary, and Health and Physical Education (K-12). The other two undergraduate curricula (without certification) are Recreation and Physical Education—minor(s) required.



## REQUIREMENTS FOR HEALTH, PHYSICAL EDUCATION AND RECREATION MAJORS.

All students are required to meet **General University Requirements** for the Bachelors Degree. These requirements are described in the "Academic Information Section" of this Catalog. The courses are part of the curriculum and should be taken at the prescribed time.

All students wishing to follow the curricula for certification must meet the **Teacher Education and Retention Requirements**. These requirements and proper procedures are described in the "Academic Information Section" of this Catalog.

All students must meet all Departmental requirements and follow a selected prescribed curriculum. "C" is the lowest acceptable grade for major courses for credit toward graduation requirements.

## DEGREE PROGRAMS HEALTH INSTRUCTION (with Certification)

The curriculum is designed to prepare a health specialist to teach effectively with the knowledge, competencies, methodology and material required. The student will do the pre-service field experience on the secondary level.

In addition to the required Departmental courses, plus the General Education and Teacher Education core, Health Instruction majors must take the following.

HCA 201 Introduction to Health Care Organization .....	3
MCB 250 Principles of General Bacteriology .....	4
MCB 410 Pathogenic Microorganisms .....	4
NTR 312 Nutrition for Teachers .....	3
Soc 420 Population Problems .....	3
Zoo 201-202 Human Anatomy and Physiology .....	4-4
EDCI 463 Audio Visual Aids in Education .....	2
SW 470 Social Gerontology .....	3

## REQUIREMENTS FOR GRADUATION HEALTH INSTRUCTION

General Education Requirements .....	43 Hours
Professional Education Core .....	33 Hours
Block Courses HEA 371H .....	3
HEA 472 H .....	9
EDRD 491 .....	3
EDCI 472 (0) .....	0

Major course requirements in Department  
HPER .....27 Hours

HPER \*101-\*304-450-402  
(GE) HEA \*151, HEA \*300, \*303, 304,  
\*305, \*306, \*307S  
PE 312-313-314 .....\*4 Hours  
PE \*331

\*Pre-requisites for Student Teaching. Application for Student Teaching must be filed one (1) semester prior to the enrollment semester.

## CURRICULUM FOR A MAJOR IN HEALTH INSTRUCTION (with certification)

FRESHMAN YEAR		Credit	Hours
		Fall	Spring
Eng 101-102 .....	3	3	
Hist 201-202 .....	3	3	
Chem 121-122 .....	4	4	
HPED 101-Math 111 .....	2	4	
Hea 151-PE 12a .....	2	1	
PE 11 .....	1	0	
	15	15	

SOPHOMORE YEAR		Credit	Hours
		Fall	Spring
Eng 211-212 .....	3	3	
Zoo 201-202 .....	4	4	
EDCI 201-Art 133 .....	3	2	
MCB 250-Mus 131 .....	3	2	
HCA 201-GPA 221 .....	3	3	
PE 15-50 .....	1	1	
Psy 242 .....	0	3	
	17	18	

JUNIOR YEAR		Credit	Hours
		Fall	Spring
Hea 300, Hea 307s .....	2	2	
Hea 303, Hea 305 .....	2	2	
Hea 306, HPED 304 .....	2	2	
PE 312, Psy 312 .....	2	3	
PE 331, PE 313 .....	3	2	
EDCI 301, EDCI 387 .....	3	3	
MCB 410, Soc 420 .....	3	3	
	17	17	

SENIOR YEAR		Credit	Hours
		Fall	Spring
PE 314, Hea 371H .....	2	3	
HPED 450, Hea 472H .....	2	9	
HPED 402, Educ 472-0 .....	3	0	
NTR 312, Educ 491 .....	4	3	
SW 470 .....	3	0	
EDCI 463 .....	2	0	
EDSE 465 .....	3	0	
	19	15	

TOTAL HOURS: 132

## PRE-PHYSICAL THERAPY (option).

The course of study provides the necessary college preparatory work leading to entrance into the professional preparation institution. In addition, an individual will have gained a teaching certificate in the area of Health Instruction. The broad supportive background is similar to that which is required for other degrees within the department, with such additions as

provide the strength in subject matter important to the physical therapy schools. One may also, if one wishes, matriculate under the Health and Physical Education course of study and elect the chemistry and physics to satisfy the physical therapy requirements. The student would become proficient in a wide range of physical skills and thus be better prepared to assist patients in their efforts to regain their physical efficiency.

Suggested additional courses in preparation for application to Physical Therapy School.

Math 161-162 .....	4-4
Physics 191-192 .....	1-1
Physics 211-212 .....	4-4
Chemistry 311-312 .....	4-4

## ELEMENTARY PHYSICAL EDUCATION (with certification K-7)

The curriculum is designed to prepare the elementary physical education specialist. The student will do the pre-service field experience on the elementary level.

## REQUIREMENTS FOR GRADUATION Physical Education—Elementary

General Education Requirements .....	43 Hours
Professional Education Core Block—PE 371E-PE 472E EDRD 491 .....	15 Hours
Block .....	15

Major Requirements .....51 Hours

PE Elementary	
*HEA 306 First Aid and Care of Injuries ....	2
HEA 300 School Health Program .....	2
*HPED 101-402,403, 450 .....	8

Fundamental and Technique .....	8
Prior to Student Teaching	
Team Sports *4 Sports (Football 201, Basketball 204, Soccer and Softball)	
Individual and Dual *2 3 Sports (Badminton, Tennis, Track and Field)	

PE 202 .....	2
Dance *222A-B or 227 .....	4
PE *300 Play and Lead Up Games .....	2
PE *301 Gymnastics .....	2
PE *302 Movement Exploration .....	2
PE 304 Elements of Safety .....	2
PE 312 Anatomy-PE 313 Kinesiology .....	*4
PE 314 Physiology of Exercise .....	*4
PE 315 Teaching Individual and Dual Sports .....	2
PE *331 Measurement and Evaluation in PE .....	3
PE *334 History and Philosophy .....	3
PE 335 Principles of Perceptual Motor Development .....	2
PE 434 Planning Special Events and Demonstrations .....	2

\*Prerequisites for student teaching



CURRICULUM FOR A MAJOR IN PHYSICAL EDUCATION (ELEMENTARY)			
FRESHMAN YEAR			
	Credit Hours		
	Fall	Spring	
Eng 101-102 .....	3	3	
HPED 101, Hea 151 .....	2	2	
Math 111, GPA 221 .....	4	3	
Hist 201, 202 .....	3	3	
Art 133, Mus 131 .....	2	2	
PE 11, PE 12a .....	1	1	
PE 15-50, PE 36 .....	1	1	
	16	15	

SOPHOMORE YEAR			
	Credit Hours		
	Fall	Spring	
Eng 211-212 .....	3	3	
Zoo 201-202 .....	4	4	
EDCI 201, Psy 242 .....	3	3	
Hea 306, Hea 300 .....	2	2	
PE 222A, PE 227 .....	2	2	
PE 201-214, PE 301 .....	1	2	
PE 202, PE 203-214 .....	1	1	
PE 201-214 .....	1	1	
	17	18	

JUNIOR YEAR			
	Credit Hours		
	Fall	Spring	
PE 312, 313 .....	2	2	
PE 331, PE 315 .....	3	2	
PE 335, PE 334 .....	2	3	
PE 302, Psy 312 .....	2	3	
Educ 301, Educ 387 .....	3	3	
PE 201-214 .....	1	1	
PE 201-214 .....	1	1	
HPED 304, PE 300 .....	2	2	
	16	17	

SENIOR YEAR			
	Credit Hours		
	Fall	Spring	
HPED 403, Educ 491 .....	2	3	
HPED 450, PE 371e .....	2	3	
HPED 402, PE 472e .....	2	9	
EDSE 465, EDCI 472-0 .....	3	0	
PE 314 .....	2	0	
PE 434 .....	2	0	
Electives (300-400) .....	5	0	
	18	15	

TOTAL HOURS:        132

**SECONDARY PHYSICAL  
EDUCATION (with  
certification 7-12).**

The curriculum is designed to prepare the secondary physical education specialist and those teachers interested in coaching. The student will perform the pre-service field experience on the high school level.

**REQUIREMENTS FOR GRADUATION  
PHYSICAL EDUCATION-SECONDARY**

General Education Requirements .....	43 Hours
Professional Education Core .....	18 Hours plus
Block Courses: Educ 491	
Reading .....	3
PE 371S .....	
Methods of PE .....	3
PE 472S .....	
Student Teaching .....	9

Major Requirements. 53 Hours.	
Hea 300        School Health Program .....	2
Hea 303        Environmental Sanitation .....	2

*Hea 306	First Aid and Care of Injuries .....	2
Hea 307S	Health Instruction—Secondary Schools .....	2
*HPED 101	Orientation .....	2
HPED 304	Elements of Safety .....	2
HPED 402	Organization and Administration of HPE .....	2
HPED 403	Physical Education for Atypical .....	2
HPED 450	Senior Project Writing .....	2
*PE	Fundamental and Techniques .....	8
	Three (3) Team Sports .....	-
	Four (4) Individual and Dual Sports .....	-
PE 202	Theory of Aquatics .....	2
*PE	Dance .....	4
	PE 222A or B, PE 227 .....	-
*PE 301	Gymnastics .....	2
*PE 312	General Anatomy .....	2
*PE 313	Kinesiology .....	2
*PE 314	Physiology of Exercise .....	2
*PE 315	Teaching Individual and Dual Sports .....	2
*PE 331	Measurement and Evaluation .....	3
*PE 334	History and Philosophy of Physical Education .....	3
PE 420 to PE 428	Coaching Courses .....	4
	Electives .....	3

\*Prerequisites for Student Teaching.

Application for Student Teaching must be filed one (1) semester prior to the enrollment semester.

**CURRICULUM FOR A MAJOR IN  
PHYSICAL EDUCATION  
(SECONDARY)**

FRESHMAN YEAR			
	Credit Hour		
	Fall	Spring	
ENG 101-102 .....	3	3	
HIST 201-202 .....	3	3	
MATH 111, HEA 151 .....	4	2	
ART 133, MUS 131 .....	2	2	
HPED 101, GPA 221 .....	2	3	
PE 11, PE 12a .....	1	1	
PE 15-50, PE 36 .....	1	1	
	16	15	

SOPHOMORE YEAR			
	Credit Hours		
	Fall	Spring	
ENG 211-212 .....	3	3	
EDCI 201, PSY 242 .....	3	3	
ZOO 201-202 .....	4	4	
PE 222A, PE 222B .....	2	2	
HEA 300, HEA 306 .....	2	2	
HPED 304, PE 301 .....	2	2	
PE 201-214, PE 202 .....	1	1	
PE 201-214 .....	1	1	
	18	18	

JUNIOR YEAR			
	Credit Hours		
	Fall	Spring	
PE 312, PE 313 .....	2	2	
PE 335, PE 315 .....	2	2	
PE 331, PSY 312 .....	3	3	
HEA 307s, HEA 303 .....	2	2	
PE 201-214, Educ 301 .....	1	3	
PE 201-214, Educ 387 .....	1	3	
PE 201-214 .....	1	1	
PE 334, PE 201-214 .....	3	1	
	15	17	

SENIOR YEAR			
	Credit Hours		
	Fall	Spring	
PE 420-428, PE 472s .....	4	9	
HPED 402, EDCI 472-0 .....	2	0	
HPED 450, PE 371s .....	2	3	
EDSE 465, EDRD 491 .....	3	3	
PE 314 .....	2	0	
HPED 403 .....	2	0	
Electives (300-400) .....	3	0	
	18	15	
TOTAL HOURS: 132			

**HEALTH AND PHYSICAL EDUCATION  
(Certification K-12)**

Students may do pre-service on elementary or secondary level, but student must follow with the pre-service experience the same semester as the chosen level for the methods course.

**REQUIREMENTS FOR  
GRADUATION  
HEALTH AND PHYSICAL  
EDUCATION (K-12)**

General Education Requirements .....	43 Hours
Professional Education Core .....	18 Hours plus
Block Courses: PE 371E or S and 372S	
EDRD 491, 472 (0), PE 472E or S	

Selected methods level determines the level for student teaching and must be taken the same semester.

Major Requirements. 61 Hours.	
HPED *101-304-402-403-450	
HEA *300-*303-305-*306-307E or S	
Nutrition 312	
PE (Fundamental and Technique Courses)	*4 Hours

PE 202	
PE *301	
Dance PE 227-221A or B .....	*4 Hours

PE 302-*300	
312-313-314 .....	4 Hours
PE 302-315-335 .....	*2 Hours

*331 *334 .....	6 Hours
PE 371E or S-(Not student teaching semester)	
PE 420 of 428-Coaching courses	4 Hours

\*Prerequisites for Student Teaching.

**CURRICULUM FOR A MAJOR IN  
HEALTH AND PHYSICAL  
EDUCATION**

FRESHMAN YEAR			
	Credit Hour		
	Fall	Spring	
Eng 101-102 .....	3	3	
Hist 201-202 .....	3	3	
Math 111, Hea 151 .....	4	2	
Art 133, Mus 131 .....	2	2	
HPED 101, GPA 221 .....	2	3	
PE 11, PE 36 .....	1	1	
PE 12, PE 15-50 .....	1	1	
PE 202 .....	0	1	
	16	16	



**SOPHOMORE YEAR**

Course	Credit Hours	
	Fall	Spring
Eng 211-212 .....	3	3
EDCI 201, Psy 242 .....	3	3
Zoo 201-202 .....	4	4
Hea 300, Hea 306 .....	2	2
PE 301, Hea 305 .....	2	2
HPE 304, PE 201-214 .....	2	1
PE 227, PE 302 .....	2	2
PE 201-214 .....	0	1
	18	18

**JUNIOR YEAR**

Course	Credit Hours	
	Fall	Spring
PE 312, Hea 303 .....	2	2
PE 315, PE 300 .....	2	2
Hea 307S, PE 335 .....	2	2
PE 331, PE 313 .....	3	2
EDCI 301, Psy 312 .....	3	3
PE 222A-B, EDCI 387 .....	2	3
Ntr. 312, PE 203-214 .....	3	1
PE 201-214, PE 334 .....	1	3
	18	18

**SENIOR YEAR**

Course	Credit Hours	
	Fall	Spring
HPED 402, PE 472E or S .....	2	9
HPED 450, Educ 472-0 .....	3	0
EDSE 465, PE 371E or S .....	3	3
PE 314, EDRD 491 .....	2	3
HPED 403 .....	2	0
PE 371E or S .....	3	0
PE 420-421 .....	2	0
PE 422-428 .....	2	0
	19	15

TOTAL HOURS: 137

**PHYSICAL EDUCATION—NON-TEACHING (without certification).**

Student must select one or two minor fields of study. Suggested approved minors are Business, Communication, and Psychology. Other minors must be approved by Advisor and Department Head.

**CURRICULUM FOR A MAJOR IN PHYSICAL EDUCATION**  
**Bachelor of Science Degree**  
**Without Teacher Certification**

**FRESHMAN YEAR**

Course	Credit Hours	
	Fall	Spring
Eng 101, 102 .....	3	3
Hist 201, 202 .....	3	3
Math 111, 112 .....	4	3
PE 11, PE 12 .....	1	1
Art 133, Mus 131 .....	2	2
HPED 101, GPA 221 .....	2	3
	15	15
	30	

**SOPHOMORE YEAR**

Course	Credit Hours	
	Fall	Spring
Eng 211, 212 .....	3	3
Zoo 201, 202 .....	4	4
Hea 305, 306 .....	2	2
HPED 304, PE 222A or 222B or 222C .....	2	2
PE 15-50 (activity course) .....	1	1
Hea 151, Thea 120 .....	2	2
Electives (200-300 level) .....		
Minor .....	3	3
PE 201-214 (fund & tech course) .....	1	1
	18	18
	36	

**JUNIOR YEAR**

Course	Credit Hours	
	Fall	Spring
PE 312, 313 .....	2	2
Hea 303, PE 334 .....	2	3
PE 202, PE 332 .....	1	2
PE 201-214 .....	3	3
PE 420-426 (Coaching) .....	2	2
Psy 201, Psy 300-400 level .....	3	3
Elective (300-400 level) Minor .....	3	3
Elective (300 level) .....		
H-PE-HPE-Rec .....	2	0
	18	18
	36	

**SENIOR YEAR**

Course	Credit Hours	
	Fall	Spring
PE 314, PE 331 .....	2	3
HPE 450 .....	2	0
PE 201-214 .....	2	2
Elective (300-400 level) Minor .....	3	3
Elective (300-400 level) .....	3	4
Sociology (300-400 level) .....	3	3
	15	15
	30	

TOTAL HOURS: 132

General Education .....	46
Major .....	49
Minor .....	18
Electives-Sociology .....	6
Electives .....	7
Psychology .....	6
	132

**SUGGESTED MINORS FOR HEALTH, PHYSICAL EDUCATION AND RECREATION MAJORS**

**General Business Administration**

QM 215 Basic Computer Science .....	3
BL 300 Legal Environment of Business .....	3
MG 301 Management, Organization, Theory and Behaviors .....	3
MK 301 Basic Marketing .....	3
MG 403 Personnel Administration .....	3
AC 211 Principles of Accounting .....	3
or	
EC 211 Economic Principles .....	3
BA 400L Elective .....	3
AC 212 Principles of Accounting .....	3
	18

**MASS COMMUNICATION**

Spch 200 Introduction to Mass Communication .....	2
Spch 360 Broadcasting in America .....	3
Spch 364 Radio and Television Production .....	3
Spch 440 Radio and Television Programming .....	3
Jour 301 Survey of Journalism .....	3
Jour 302 New Writing .....	3
Jour 304 Advanced Reporting .....	3
	20

**PSYCHOLOGY**

Psy 201 General Psychology .....	3
Psy 310 Psychology of Adjustment .....	3
Psy 333 Group Dynamics and Human Relations .....	3
Psy 341 Social Psychology .....	3

**Psy 351 Developmental Psychology:**

Child Development .....	3
Psy 381 The Psychology of Adolescence .....	3
Psy 430 or	
Psy 471	
Psy 430 Motivation and Emotion .....	-
Psy 471 Industrial and Personnel Psychology .....	-
	21

**RECREATION.**

The curriculum in recreation has as its purpose to give the student theory and practice in the broad field in recreation and to prepare him to meet requirements for recreational employment. This major is designed to develop leaders in recreation with a sound general education and an insight into the social responsibilities of community agencies.

The curriculum is designed to prepare students for a variety of positions as recreation leaders or directors in public and private agencies, including administrative positions in parks, recreation departments, positions as supervisors or community center directors as well as industrial, hospital, church, institution, settlement house and armed services recreation program workers.

The curriculum includes courses in education, psychology, natural and social sciences and courses in sports, aquatics, crafts, drama, music, social recreation, dance and camping. Practical experience is obtained through community as well as camp work experience.

All students in the recreation curriculum must meet the general education requirements of the University. To meet these requirements, students are required to complete approved sequence of courses in the areas of the humanities, mathematics, the natural sciences, and the social sciences. Curriculum requirements total 132 hours.

**CURRICULUM FOR A MAJOR IN RECREATION**

Course	Credit Hours	
	Fall	Spring
Eng 101-102 .....	3	3
Hist 201-202 .....	3	3
HPED 101, Hea 151 .....	2	2
Sci 121-122 .....	3	3
Mus 131, Art 133 .....	2	2
PE 11, PE 12a .....	1	1
PE 14-50 .....	1	1
	15	15



## SOPHOMORE YEAR

	Credit Hours	
	Fall	Spring
Eng 211-212 .....	3	3
Math 111, GPA 221 .....	4	3
Psy 201, Psy 242 .....	3	3
Spch 220, PE 202 .....	2	1
PE 222A, PE 222B .....	2	2
PE 201-214, Art 200/300 .....	1	3
Elective, PE 201-214 .....	2	1
PE 201-214 .....	0	1
	17	17

## JUNIOR YEAR

	Credit Hours	
	Fall	Spring
Hea 300, Hea 306 .....	2	2
PE 300, PE 201-214 .....	2	1
PE 312, PE 313 .....	2	2
Psy 310, PE 314 .....	2	2
Art/Ind Art, Drama 300-400 .....	3	3
Mus 301, Rec 302 .....	3	2
Rec 303-353 .....	2	2
Art 301, PE 201-214 .....	3	2
	19	16

## SENIOR YEAR

	Credit Hours	
	Fall	Spring
Rec 412, Rec 473 .....	2	6
Rec 304, HPED 481 .....	2	2
Soc 300/400, Educ 463 .....	3	2
HPED 450, PE 306 .....	3	3
PE 315, Electives .....	2	3
PE 332 .....	2	0
PE 434 .....	2	0
Electives .....	2	0
	18	16
TOTAL HOURS: 132		

## COURSE OFFERINGS

### HEALTH (HEA)

**HEA 151. Personal Hygiene. (2)** Emphasis is placed on health through a consideration of various conditions which affect health. It includes a comprehensive coverage of important trends on major health areas such as those involving the psychological or adjustive processes, those of a psychological or biological nature, and it addresses itself to the issues of health services and the environment in which we live. A requirement for students fulfilling the core in general education. Combined with UTN 1110.

**HEA 300. The School Health Program. (2)** Designed to give a general knowledge of those procedures established to determine the health status of the child and to relate ways and means of enlisting the cooperation of pupils, teachers, parents and others in health protection. Special emphasis is placed on the functions of all school personnel. Prerequisite: 151, combined with UTN 3510.

**HEA 303. Environmental Sanitation. (2)** Emphasis is placed on the expanding concept of community hygiene and sanitation in our society. It includes not only sanitation of food, water, waste disposal, material health and health in industry, but drug abuse, pollution control and the utilization of citizens for total community participation. Combined with UTN 3000.

**HEA 305. Family Health. (2)** Aims to acquaint the student with the important individual, family, and community factors essential to healthful living. The significance of heredity,

nutrition, and housing in effective family living is emphasized. Stress is placed upon the provision and use of health services for maternal and child care and for the prevention of illness. The mental, physical, and emotional aspects of family health are also considered. Prerequisites: 6 semester hours in health education. Required of all majors in health, physical education and recreation.

**HEA 306. First Aid and Care of Injuries. (2)** Demonstration and practice of general first aid care for emergencies resulting from physical trauma or acute illness. Special attention also given to preventing and administering to the athletic injury with discussion, demonstration and practical laboratory experiences related to techniques used in taping and bandaging provided. A Red Cross First Aid Certificate is awarded for successful completion of the course. Combined with UTN 3210.

**HEA 307E. Health Instruction for the Elementary School. (2)** Fundamental principles of organizing and teaching health education at the elementary school level. Emphasis is placed on understanding the health problems and developmental levels of the elementary school child and the methods, materials, and techniques available for this purpose.

**HEA 307S. Health Instruction for the Secondary School. (2)** Special emphasis is placed on teaching methods, selection of course content, class organization, methods of evaluation and construction of teaching units and teaching aids on the secondary level.

**HEA 371H. Methods and Materials of Health Education (3)** Attention focused on the curriculum and content of health education program with consideration given to procedures, techniques, and equipment used in teaching. Study, discussion, and experiences in planning and conducting and health lesson provided. Field Experience required.

**HEA 472 H. Student Teaching in Health. (9)** This course is designed to provide an opportunity for students to put to use methods, techniques and materials of instruction in Health in classroom setting. Prerequisites: specific courses as established for the program, plus at least a "C" in methods.

## HEALTH AND PHYSICAL EDUCATION (HPED)

**HPED 101. Health, Physical Education and Recreation Orientation. (2)** Introduces freshmen to the requirements for effective college living in general and to the field of health, recreation and physical education in particular. Includes a review of objectives, scientific foundations, opportunities for service and the qualifications and professional personnel in these areas.

**HPED 304. Elements of Safety. (2)** Is concerned with the exploration of concepts that foster safe living at home, in school, on the job and at leisure.

**HPED 402. Organization and Administration of Health, Physical Education and Intramural Programs. (2)** A major course concerned with the philosophies, policies and procedures basic to establishing an effective program in the

area, in consort with the curriculum of the school and the needs of the community. Instruction will include facilities and equipment, purposes for and the coordinating of intramurals, scheduling and content of classes, along with the same concern for varsity athletics, their control and impact. Required of Health and Physical Education and Physical Education (Elementary and Secondary).

**HPED 403. Physical Education for the Atypical. (2)** A study of the types of handicapping conditions requiring modified physical activity with instruction in specific activities for each type. Class work is organized on a laboratory basis to provide practical experiences in conducting the program. Prerequisite: 10 hours in health, physical education and recreation and physical education 312-312. Required of all majors.

**HPED 450. Senior Project Writing. (3)** Designed to give students opportunities to initiate and develop projects from problems of interest to them in a junior thesis style. Enrollment in course at least one semester prior to the expected semester of graduation is advised.

## PHYSICAL EDUCATION (PE)

**Service Courses—**This section contains required and elective physical education courses for the general student body. In most cases, two activity experiences are provided. (Note PE 12a is for HPED majors only).

**PE 11. Team Games and Conditioning. (1)** Required of freshmen.

**PE 12a. Introduction to Swimming. (1)** Required of freshmen majors.

**PE 12b. Elementary Swimming. (1)** Required of other than HPED majors.

**PE 15. Modern Dance. (1)** Designed to give an introduction to modern dance techniques and elementary composition.

**PE 16. Badminton. (1)** An elective course designed to develop skill in badminton.

**PE 17. Volleyball. (1)** An elective course in which volleyball is taught.

**PE 18. Soccer. (1)** An elective course in which the basic elements of soccer are taught.

**PE 19. Handball. (1)** An elective course, in handball elements.

**PE 20. Golf. (1)** An elective course in which the basics of golf are taught.

**PE 21. Bowling. (1)** An elective course designed to teach elementary bowling.

**PE 22. Shuffleboard. (1)** An elective course in which shuffleboard is taught.

**PE 23. Speedball. (1)** An active elective in which speedball is taught.

**PE 24. Basketball. (1)** An elective concerned with teaching basketball skills.

**PE 25. Folk and Square Dance. (1)** An elective course for folk and square dance skills.



**PE 26. Softball. (1)** An elective in which softball is taught and played.

**PE 27. Tennis. (1)** An elective course for the teaching of basic tennis.

**PE 28. Social Dance. (1)** An elective course exploring different types of social dances.

**PE 29. Touch Football. (1)** An elective presenting the modified form of football.

**PE 30. Weight Training. (1)** A course designed to teach the rudiments of movement using weights.

**PE 31. Racquetball. (1)** An activity designed to teach racquetball.

**PE 32. Beginning Yoga. (2)** An elective course to teach the Yoga Postures.

**PE 33. Wrestling. (1)** A course designed to teach the skills of wrestling.

**PE 34. Archery. (1)** An elective course in which basic skills of archery are taught.

**PE 36. Stunts and Tumbling. (1)** A course for the teaching of the basic tumbling skills.

**PE 43. Track and Field. (1)** An elective course for the teaching of the elements of selected track and field activities.

**PE 44. Karate. (1)** An elective, the study of basic movements of Oriental Martial Art. Theory and practice of the mental and physical discipline related to the activity. To be taught as a sport, and for self defense.

**PE 50. (2) Scuba Diving.** Course is designed to teach safety, theory, and practice of scuba diving.

**PE 91, 92, 93, 94. Adapted Physical Education. (1)** Elective for those students who have some type of physical condition that requires limited physical activity.

## MAJOR COURSES

**PE 201. Fundamentals and Techniques of Football. (1)** Emphasis is placed on the development of the ability to demonstrate the fundamental skills of football with proficiency as well as upon the recognition of problems related to the introduction of review of these skills in teaching situations.

**PE 202. Theory of Aquatics. (1)** A course in which proficiency is to be developed through the intermediate level of water skills. Emphasis is also given to the theoretical aspects, performance and teaching of aquatic activities.

**PE 203. Fundamentals and Techniques of Badminton. (1)** A course intending to develop skills and the techniques associated with this racquet game.

**PE 204. Fundamental and Techniques of Basketball. (1)** A concentration upon development of proficiency in the performance of fundamental skills in basketball with some emphasis upon recognizing problems of the teacher in introducing and/or reviewing the skills involved.

**PE 205. Fundamentals and Techniques of Tennis. (1)** A major course in which a racquet activity is taught, for perfection of skill and for an understanding of teaching elements.

**PE 206. Fundamentals and Techniques of Track and Field. (1)** A major course concerned with the student's developing performing skills and "teaching point" awareness, in the activities involved.

**PE 207. Fundamentals and Techniques of Golf. (1)** A major course in which students learn to perform better and to understand the theory of the activity to the extent that they may instruct more effectively. Students frequently will be required to travel to off-campus sites for laboratory experiences.

**PE 208. Fundamentals and Techniques of Wrestling. (1)** A major course designed to develop individual skill and understanding of the activity.

**PE 209. Fundamentals and Techniques of Volleyball. (1)** A required course for majors which discusses fundamentals and techniques of the activity and prepares the student in methods of organizing, strategy in competition, conditioning, and related matters for instructional purposes.

**PE 210. Fundamentals and Techniques of Bowling. (1)** A major course in which individual skills are developed and practiced.

**PE 211. Fundamentals and Techniques of Archery. (1)** A major course in which the skills of archery are sharpened and awareness of teaching concerns explored.

**PE 212. Fundamentals and Techniques of Softball. (1)** A major course in which softball as a set of skills is taught.

**PE 213. Fundamentals and Techniques of Soccer. (1)** A major course in which the skills of soccer are sharpened.

**PE 214. Fundamentals and Techniques of Handball/Racquetball. (1)** A course in which the skills of handball or racquetball are developed. Racquetball is a modification of the older game of handball.

**PE 222A. Survey of Dance Forms; Folk and Square. (2)** A study of the history, some personalities associated with (past and present) and fundamental techniques and experiences related to folk and square dance.

**PE 222B. Survey of Dance Forms: Modern. (2)** A study of the history some personalities associated with (past and present) and fundamental techniques and experiences related to modern dance.

**PE 222C. Survey of Dance Forms: Jazz and Social Dance. (2)** The study and skill development in selected social dances. The effort is to understand and develop skill in the continuum of movements in the activity.

**PE 222D. Survey of Dance Forms: Tap Dance. (2)** Development of basic skills and understanding related historical elements associated with the tap dance.

**PE 227. Fundamental Rhythms and Music for Dance. (2)** Provides an understanding of music in its relationship to dance; offers experiences in creating music with rhythm instruments (standards and contrived) for dance accompaniment; surveys the area of fundamental movement patterns through participation in creative and exploratory experiences.

**PE 300. Play and Lead-Up Games. (2)** Designed to offer the major theory and practice in exploratory experiences, lead-up activities, low organized games (for classroom, gymnasium, out-of-doors), drills, and self testing activities primarily for use in elementary physical education programs. A study of factors that make up desirable elementary physical education programs will be included. Suggestions as to how these activities may be adapted to use at secondary levels and in recreational situations will be discussed.

**PE 301. Gymnastics and Apparatus Work. (2)** Deals with the acquisition of skill and the development of intermediate to advanced techniques in gymnastics and apparatus works.

**PE 302. Movement Exploration. (2)** Offers theoretical and practical experiences in developing the problem-solving method of teaching motor activities. Includes study and analysis of the implications of the exploratory method for teachers at pre-school, primary, and intermediate levels of instruction.

**PE 306. Officiating Techniques. (2)** To teach the techniques of officiating in selected sports and provide practical experiences through officiating in intramural activities.

**PE 312. General Anatomy. (2)** A basic course in gross anatomy designed to provide instruction in the study of the gross structure of the human body, and all that implies. Required of majors.

**PE 313. Kinesiology. (2)** A study concerned with motion of the human body, its segments and their mechanical functioning in games, sports, and other physical education activities. Required of majors. Prerequisite—PE 312.

**PE 314. Physiology of Exercise. (2)** A course designed to combine several science disciplines, neuromuscular activities, circulation and respiration, metabolism, environmental aspects of exercise, fatigue and training, health and physical fitness. Along with the academic information, a laboratory experience is provided.

**PE 315. Teaching Individual, Dual and Team Sports. (2)** A course in which the implications of the fundamental and technique experiences are focused on teaching of all activities. Methods of planning and presenting skills to be learned in the most effective manner are explored.

**PE 319. Physical Fitness Activities. (2)** The course is designed to determine one's level of fitness, participate in selected activities to improve fitness, analyze changes in fitness in the Human Performance Laboratory.

**PE 323. Modern Dance: Techniques and Composition. (2)** Intermediate advanced modern dance techniques and an introduction to the choreography process. Elective for ma-



jors and non-majors with previous experience in modern dance.

**PE 324. Tap Dance: Technique and Choreography. (2)** Intermediate and advanced experience for those who desire it; elective for majors and non-majors with previous experience in tap dance.

**PE 325. Square Dance Calling and Modern Square Dance. (2)** Techniques for calling square dance introduced with laboratory experiences for developing individual styles; participation in square dance experiences which involve the modern and up-to-date figures and innovations.

**PE 326. Rhythmic Performance Groups. (2)** Theory and practice related to the organization, training, and supervision of rhythmic groups (dance drill teams, majorettes, modern dance groups, tap dance groups, dance "half-timers", etc.); prerequisite: previous dance experience.

**PE 331. Measurement and Evaluation in Physical Education. (3)** This course acquaints the student with tests available in physical education. It emphasizes the theory, application, and administration of tests for use in evaluating the content and methods of measuring student's achievements, criteria for classification of students, and marking. Required of majors in health and physical education.

**PE 332. Water Safety and Instruction. (2)** Practice is provided for all coordinate styles of swimming, instruction, life saving and water safety skills, and in techniques leading to the American Red Cross Senior Life Saving and Water Safety Certification. Prerequisite PE 202 or equivalent.

**PE 334. History and Philosophy of Physical Education. (3)** A basic survey of the history of physical education. It provides orientation in the essential unity of the educational process in the field of physical education, and it provides a foundation for philosophy, principles, curriculum, organization and administration, methods and trends of modern physical education.

**PE 335. Principles of Perceptual Motor Development. (2)** This course is structured to identify basic principles of physical education which serve as guidelines for action by prospective teachers in planning for teaching and in deciding what and how to teach.

**PE 371E. Materials and Methods in Physical Education for Elementary Schools. (3)** Attention given to the nature and content of an adequate elementary physical education program with study and discussion of current principles, practices, and procedures applicable. Experience include developing teaching units and lesson plans, observation in the elementary school, and practice in conducting skill lessons. Field Experience required.

**PE 371S. Materials and Methods in Physical Education for Secondary Schools. (3)** Special attention is given to content of the program, methods, procedures, techniques and devices relative in individual and dual sports, team games, rhythms, self-testing activities and related events for boys and girls on the secondary school level. Required of majors and minors in physical education. Observation in

Secondary Schools required. Field experience required.

**PE 372D. Methods of Teaching for Dance. (2)** Practical procedures, lead-up activities, planning and conducting the dance lesson with attention to special problems presented at various age-grade levels and under various teaching conditions (folk, square, social, modern, and tap dance).

**SOC-PE 375. Sociological Implications of Sports. (3)** This course deals with social mobility, environment adjustments, problems and attitudes to male and female athletes. There will be some concern with race, culture and backgrounds of various ethnic groups along with factors involved in apparent group superiority in some sport activities. An elective, for most majors, taught in the Department of Sociology.

**PE 420. Coaching of Football. (2)** An examination and study of rules, methods of organizing practice and management of teams, team offense and defense, strategy and philosophy of coaching football. An important unit is that of officiating in the activity.

**PE 421. Coaching of Basketball. (2)** A course concerned with rules and regulations and theory of developing basketball teams. The skills and team strategies are examined as parts and as wholes. Some officiating concepts will naturally be discussed.

**PE 422. Coaching of Baseball. (2)** All elements of the game as they concern coach—the skills, personnel, theory, practice sessions, and team organization are explored. A natural concern with officiating will be given some attention, as they are important to facets of performance.

**PE 423. Coaching of Track and Field. (2)** A course concerned with the presentation and practice of skills associated with coaching and officiating of track and field activities. Officiating at track meets required.

**PE 424. Coaching of Volleyball. (2)** Is concerned with the theory and practice of those elements important to the coaching and officiating of volleyball as a competitive activity.

**PE 425. Coaching of Gymnastics. (2)** The course presents the facets of gymnastics important to coaching and officiating of the activity.

**PE 426. Coaching of Aquatics. (2)** The concerns for theory, events, training personnel, etc. of swimming, as they are important to coaching a team is discussed. The alignment of events in meets is also part of the concern.

**PE 427. Coaching and Officiating of Individual and Dual Sports. (2)** A course in which coaching/teaching in the types of sports involved are pulled together for study.

**PE 428. Coaching and Officiating of Team Sports. (2)** A course in which all team games, their important aspects from the coach's point of view and the developing of a team are studied.

**PE 430. Defensive Football. (2)** To study the intricacies of defensive football, techniques, drills, stations, fronts, etc. Prerequisites PE 201 and PE 421. (Course offered even years).

**PE 434. Planning Special Events and Demonstrations. (2)** Provides prospective physical education teachers and recreation leaders with practical methods and materials for planning, directing, and producing demonstrational and extra-class events related to the daily instructional program of the school, or the daily activity program of the recreational institution. Greatest attention is directed toward projects which involve large numbers of participants and which are performed before an audience. Some attention given to "small-scale" events which are outgrowths of interest-group activity, class, or club experiences.

**PE 472E. Student Teaching in Elementary Physical Education. (9)** This course is designed to provide an opportunity for students to put to use methods, techniques, and materials of instruction in physical education in a classroom setting. Prerequisites—specific courses as established for the program, plus at least a "C" in methods.

**PE 472S. Student Teaching in Secondary Physical Education. (9)** This course is designed also to provide an opportunity for students to put to use methods, techniques, and materials of instruction in a classroom setting. Prerequisites—specific courses as established for the program, plus at least a "C" in methods.

**NOTE:** Student Teaching activities are specifically pointed toward teacher certification in the related area.

H472H—Teacher Certification in Health Instruction

PE 472E—Teacher Certification in Physical Education-Elementary  
PE 472S—Teacher Certification in Physical Education-Secondary  
Health and Physical Education majors earn teacher certification K-12.

## RECREATION

**REC 102. Introduction to Recreation. (2)** A survey experience designed to introduce students to the field of recreation. Topics included are the history of recreation in America; definitions of basic terms; career opportunities; the impact of recreation on the economy; and principles of recreation.

**REC 301. Nature Education. (2)** Designed to assist students in their understanding of nature and its many aspects, including astronomy, ecology, birds, camping, cave exploration, flowers, gardening, hiking, hunting, Indian lore, mountains, nature craft, trailing, trees, and zoos. Experience is gained directly by the student in a natural setting.

**REC 302. Group, Table Games and Adult Recreation Activities. (2)** Aims to develop skills and provide practical experience in the supervision and participation of table games and adult leisure activities including: checkers, chess, monopoly, dominoes, scrabble, aggravation, yoot, chinese checkers, yahtzee, table tennis, shuffleboard and deck tennis.

**REC 303. Camping Skills. (2)** Designed to develop practical camping skills through direct experiences, including cooking skills, camp site selections, hiking skills, compass reading, rock climbing, tenting, and aquatic skills.



**REC 304. Recreation for the Handicapped.** (2) Deals with the modifications of recreational activities for those persons with mental, physical and multiple handicaps.

**REC 353. Leadership Principles.** (2) Purposes to equip the student to manage and supervise recreation programs. Emphasizes program planning, current trends in principles, philosophy, skills, and techniques in leadership.

**REC 412. Administration of Recreation** (2) Aims to give the student a knowledge of the organizational, administrative, and supervisory policies and procedures utilized in the field of recreation. This knowledge is further supplemented with the skills and techniques necessary to prepare the student to meet and solve the many problems to be encountered as an administrator of recreation in parks, playgrounds, churches, camps, settlement houses, Christian associations, clubs, and community centers.

**REC 473. Field Experience** (6) Supervised work experience by students in recreational agencies. The student is selected to be considered as a recreation employee subject to such requirements and responsibilities as evidenced in gainful employment in this area. Combines theory with practical experience in recreation.

**REC 481. Intramural Practicum.** (2) Lectures, discussions, and projects dealing with types of tournaments, schedules, policies, and officiating of intramural activities.

## DEPARTMENT OF PSYCHOLOGY

**Pearl G. Dansby,  
Ph.D., Head**

The courses in the Department of Psychology are designed to satisfy the needs of two groups of students: first, students who desire to major in psychology as preparation for a career in psychology or who desire intensive training in psychology as background for social work, personnel work, or medicine; and second, students who desire training in psychology as a part of the teacher education requirements.

### Requirements for a Major in Psychology

The undergraduate curriculum in psychology terminates in a Bachelor of Science degree, or a Bachelor of Arts degree if the student takes the prescribed courses plus four semesters of a foreign language. All Majors are required to take: Psychology Orientation (not required for transfer students), General Psychology 201-Psy. of Adj.-310 and 36 additional hours in psychology courses on the 300 and 400 level. The 36 hours must include the required courses: Psychology 311, 411, 450, and 481.

Supporting courses in other departments required for a major in psychology are: Biology 111-112 or Zoo 201-202, Mathematics, 111-112 or 113. Sociology 211, English 101-02 and 211-212 or 213, Art Appreciation 131, Music Appreciation, American History 201-02, GPA 221 or 222, and PE 11-23/Health/AERO.

It is recommended that majors select electives from: Genetics, Human Physiology, Physics, Philosophy, Computer Science, History, Anthropology, Foreign Languages, Economics and Sociology.

Advanced psychology majors shall have the opportunity to practice and acquire experience in using psychological techniques, and shall be required to complete a research project under staff supervision which is carried out in the senior project seminar.

The University Testing Service and the University Counseling Center are open to advanced undergraduate and graduate psychology majors as additional sources of training and experience.

Majors who receive a grade "D" or "F" in psychology course must repeat and pass the course with a grade of "C" or better.

Students interested in study in the area of psychology who desire to qualify for teacher certification may pursue one of two courses, take a double major in psychology (and some other area, or minor in psychology and become certified in psychology).

The General Psychology courses 201, 310 plus 18 additional semester hours of 300 and 400 level psychology courses are required for a minor in psychology.

### Mental Health Concentration

In addition to the regular undergraduate course of study in psychology, the department offers a concentration in mental health. The mental health concentration is solid preparation for bachelors level entry into careers in mental health services, counseling and related work in industry and human services, as well as, for graduate study in community, clinical and social psychology. The emphasis of the program is on the scientific study of behavior and practical applications of this knowledge.

The program consists of 115 semester hours of course work in addition to a 17 semester hours core of mental health courses. The core courses are interdisciplinary and experientially oriented. Students in other departments may take a minor in mental health by taking the 17 hours of core courses and the introductory psychology course, Psychology 201.

### Social Science Degree— Concentration in Psychology

A student may elect to pursue a general degree/social science major with a concentration in psychology, (see Arts and Sciences General Degree Program in this catalogue for a detailed description). Students in this program may design a course of study comparable to the educational background provided through the psychology major while at the same time tailoring it to their specific goals and interests.

### CURRICULUM FOR MAJOR IN PSYCHOLOGY\*

FRESHMAN YEAR	Credit Hours	
	Fall	Spring
Eng. 101-102 .....	3	3
Math 111-112 .....	4	3
Hist. 201-202 .....	3	3
PE or AERO or HEALTH .....	1 or 2	1 or 2
Psy. Orient.....	2	
Psy. 201 .....		3
Art 133 .....	2	
Must. 131 .....		2
	16 or 15	15 or 16

SOPHOMORE YEAR	Credit Hours	
	Fall	Spring
Eng. 211-212 .....	3	3
Bio. 121-122 .....	4	4
PE or AERO or Health .....	1 or 2	1 or 2
Psy. 310 .....	3	
GPA 221 or 222 .....		3
Soc. 211 .....	3	
Psy. 311 .....		3
**Advised Electives .....	3	3
	17 or 18	17 or 18

JUNIOR YEAR	Credit Hours	
	Fall	Spring
Psy. 411 .....	4	
Psy. Electives .....	9	9
***Electives .....	5	9
	18	18

SENIOR YEAR	Credit Hours	
	Fall	Spring
Psy. 481 .....	3	
Psy. 450 .....		3
Psy. Electives .....	3	3
***Electives .....	12	9
	18	15

\*Graduation requirements for Bachelor of Arts degree in Psychology: Complete the prescribed core, plus 14 semester hours of a foreign language.

\*\*See recommended electives. These must be approved by major advisor before the department will accept them for credit.

\*\*\*Electives must equal a minimum of 29 hours of 300 or 400 level courses. Recommended electives: Genetics, Human Physiology, Physics, Philosophy, Computer Science, Anthropology, Foreign Language (French or German), Economics and advanced courses in the areas of Sociology and Economics.



CURRICULUM FOR A BACHELOR OF SCIENCE DEGREE IN PSYCHOLOGY WITH A CONCENTRATION IN MENTAL HEALTH

First Year	Credit Hours
English 101-02	3
Math 111-12	7
History 201-02	6
PE or AERO	2
Psychology 101	2
Psychology 201	3
Art 133	2
Music 131	2
Electives	3
Total	30

Second Year	Credit Hours
English 211-12	3
Biology 111-12	8
PE or AERO	2
Psychology 310	3
GPA 221 or 222	3
Sociology 211-330	6
Psychology 311	3
Electives	3
Total	31

Third Year	Credit Hours
*Psychology 336	3
Psychology 321	3
*Psychology 339	3
Psychology 341	3
Psychology 424	3
*Psychology 433	3
*Psychology 434	3
Advanced Electives	13
Total	34

Summer Following Completion of Third Year  
Psychology 436 3 hrs. credit  
(Course enrollment to accompany Intensive Summer Internship)

Fourth Year	Credit Hours
Psychology 411	4
*Psychology 435	3
Psychology 450	3
Psychology 481	3
Psychology 462	3
Advised Electives	13
Total	29

\*Courses in the 18 hour Mental Health Concentration Core.

COURSE DESCRIPTIONS  
PSYCHOLOGY (PSY)

All 300 and 400 level courses have as a minimum prerequisite Psychology 201 or the consent of the instructor.

**PSY. 101. Orientation for Psychology Majors.** (2) General introduction to college life with major emphasis on the broad area of the field of psychology. Main focus is on acquainting the student with psychology as a profession through active participation in discussions with speakers and field experience. Required of freshman psychology majors.

**PSY. 201. General Psychology.** (3) The basic course in introductory psychology for non-majors and majors. Designed to give the students the fundamental concepts of human behavior in the different areas of psychology.

Course is prerequisite for all advanced courses in psychology; it is required for all students majoring in psychology. (Formerly UTN-2110, 2120).

**PSY. 236. Introduction to the Delivery of Mental Health Services.** (2) This course is designed to acquaint students with the mental health profession and its delivery of mental health services. The student will observe and interact with mental health workers in various settings, e.g. community mental health centers, crisis call centers, day care centers, etc. to obtain "first hand" knowledge of what mental health services delivery encompasses. The student will be primarily concerned with the relationship of good mental health service delivery and its benefit to the community being served. (Two hours will be used for field visits and the other four for classroom discussion of visit.)

**PSY. 242. Human Development and Learning.** (3) Designed to give the student an understanding of the child as a growing organism, of how behavior is acquired, an introduction to learning theory and its classroom application, and to give the student training in the application of psychological principles to various functions of the school. Required in the Professional Education Core. Field Experience Required.

**PSY. 310. Psychology of Adjustment.** (3) Designed to help the student gain a better self-understanding with emphasis on personal and interpersonal growth, forming better life-giving relationships, maintaining self-esteem and confidence and coping with everyday stress. Sharing and disclosure activities will be encouraged. (Formerly UTN-2130).

**PSY. 311. Elementary Statistics.** (3) An introduction to statistics for the general student, with emphasis on organizing and describing numerical data; probability; sampling distributions; correlation; regression; point estimation; interval estimation; test of hypothesis and distribution free methods. (Formerly UTN-3150).

**PSY 312. Measurement Evaluation for the Classroom Management in Public Schools.** Primarily concerned with offering training in administering, scoring, processing and using the results of standardized and teacher-made tests and other measures of progress in public schools; also training is offered in the construction of objective and subjective test. Prerequisite Psychology 242. Required in the Professional Education Core. Attention is also given to various tests as they relate to the functions, techniques, and tools of guidance and counseling.

**PSY. 321. Abnormal Psychology.** (3) A descriptive and theoretical survey of the major forms of psychopathology in children, adolescents and adults. The course will examine current trends and research in the field of mental health and psychopathology. (Formerly UTN-3650).

**PSY. 323. The Psychology of the Black Experience.** (3) The Psychology of the Black Experience deals with coping strategies of Black families (as opposed to current emphasis on pathology of Black families); Psychology of the Black female; Black male. Research of Black authors will be emphasized.

**PSY. 331. Principles of Human Sexuality.** (3) A study of theories and current research related to psychological and physiological aspects of human sexuality, as well as the Effect of Sex-Roles on Sexual Interaction. (Formerly UTN-4230).

**PSY. 333. Group Dynamics and Human Relations.** (3) A study of the structures and processes of human relations in both dyads and larger groups. Cohesiveness, communication and interpersonal transactions are among the topics which will be covered. The dynamics of the relationships among class members may be included as part of the subject matter. (Formerly UTN-3020 and 4610).

**PSY. 339. Working With People: Methods and Techniques.** (3) An introduction to some methods utilized in the delivery of mental health services. The course will emphasize understanding the helping relationship from the viewpoint of both the client and the professional. Students will be introduced to methods in interviewing, observing, information gathering, and situation analysis. Some field experience will be a built-in dimension of this course.

**PSY. 341. Social Psychology.** (3) A study of interpersonal behavior including such topics as perceiving others, interpersonal attraction, prejudice, attitude change, social influence, aggression, altruistic behavior, group processes and the psychology of organizations. (Formerly UTN-3120).

**PSY. 351. Developmental Psychology: Child Development.** (3) The growth and development of the human organism from a theoretical perspective; biological, cognitive, social and emotional, development. (Formerly UTN-4550).

**PSY. 352 Adult Psychology** (3) A study of the developmental tasks of adulthood. Emphasis will also be given to the search for meaning and the courage to create one's lifestyles. (Formerly UTN-4550).

**PSY. 424. Behavior Modification.** (3) Designed to give the student a firm grounding in Behavior theory, of applications and the theoretical basis for several discrete methods of behavioral management in the home, clinical settings, and the school. Ethical consideration of manipulating human behavior will thoroughly be explored. Contrasts with other techniques and criticism will be documented. (Formerly UTN-4110).

**PSY. 425 Personality Theory** (3) A study and analysis of the major theoretical approaches to the personality. (Formerly UTN-4510).

**PSY. 430 Motivation and Emotion** (3) An examination of some of the major theories and issues in the areas of human motivation and emotion. (Formerly UTN 3220).

**PSY. 431 Physiological Psychology** (3 hrs. lecture 1 hr lab) An introduction to the study of the relationship between bodily processes and behavior. Emphasis is placed upon the basic anatomy and physiology of sensory and motor functions, motivation, emotion, learning and behavior disorders. The laboratory focuses on individual and group experience in these areas. (Formerly UTN-4710).



**PSY. 433 Community Psychology: Individual and Group Intervention (3)** This course focuses on community based individual and group intervention strategies. Major issues in intervention will be examined. Beginning skills applicable to the mental health fields will be emphasized. Suggested prerequisites: Psy. 339.

**PSY. 434 Rehabilitative Psychology: (3)** The course is designed to develop competence in the development and implication of social skill training programs. Suggested prerequisites: PSY 339 and PSY 424.

**PSY. 435 The Psychology of Managing People and Services (3)** Interdisciplinary course between Psychology, Government and Public Affairs and Sociology. The course is designed to introduce the student to the basic managerial skills utilized in human service and the role of local, state and national governmental agencies in human service delivery. An understanding of the politics of service delivery will be emphasized. A field experience is a component of the course. Suggested prerequisite: Psy. 339.

**PSY. 436 Field Placement in Psychology (3)** Placement experience in a mental health setting. A minimum of 9 hours per week at the practicum site is required. Prerequisites: Psy 339, 433, and 434.

**PSY. 437 Fundamentals of Counseling (3)** This course is designed to provide the student with an orientation to issues, problems, and values related to the counseling process. Emphasis will be placed on the development of basic counseling skills.

**PSY. 450 Senior Project (3)** Required of all seniors majoring in Psychology. A course in which students plan and carry out projects in the area of psychology under the supervision of a faculty person.

**PSY. 353 Psychology of Death and Dying (3)** A study of such topics as the dying person, attitudes toward death, children and death, grief, funeral rites, euthanasia and criteria for determining death. Emphasis will be placed on individual experience. (Formerly UTN-4210).

**PSY. 373 Educational Psychology (3)** Increasing the effectiveness of learning. (Formerly UTN-3730).

**PSY. 373-375 Problems in Educational Psychology (3) (3) (3)** (Formerly UTN 4350-60-70).

**PSY. 376-377 Field Experience in Educational Psychology (1) (1)** Ed. 3410-20-30).

**PSY. 381 The Psychology of Adolescence (3)** Examination of the major theories and research on the physiological, emotional, mental, and sociocultural characteristics of adolescent development. (Formerly UTN 3810).

**PSY. 383 Effective Parenting (3)** A synthesis of parenting skills and specific ways for teachers to communicate these to parents. (Formerly UTN 3830).

**PSY. 411 Foundations of Psychological Investigation (4)** Introduction to methods of behavioral research commonly employed in

psychology and education. Topics include methods of observing behavior, measurement, subject selection, design and interpretation of behavioral research, research ethics and conducting and reporting research projects in the behavioral sciences. (Formerly UTN-3310 and 3320).

**PSY. 412 Principles of Conditioning (3 hrs. lecture 1 hr. lab)** A study of both classical and operant conditioning including such topics as reinforcement, scheduling acquisition of response, extinction, generalization and discrimination, and applications to complex human learning. The laboratory includes experiments in animal and human learning. (Formerly UTN-3210).

**PSY. 413 Human Learning and Cognitive Processes. (4)** A study of such topics as memory, problem solving information processing, concept formation and psycholinguistics. Lecture Lab (Formerly UTN 3230).

**PSY. 414 Mental Health in the Classroom (3)** The mental hygiene of the child as affected by his total environment. An understanding of the nature of positive mental health (formerly mental hygiene) (Formerly UTN 4130).

**PSY. 420 Perception (4)** A study of the processes by which individuals acquire information about their environment. Topics include perceptual learning, sensory mechanisms and impairments, illusions, cultural and personality influences, subliminal perception and ESP. Emphasis on demonstration of sensory phenomena with subsequent discussion. Lecture, Lab (Formerly UTN 3210).

\*Description does not appear in catalog.

**PSY. 451 A,B,C, Readings and Research in Psychology (3) (3) (3)** Individual study and research under faculty guidance. Prerequisite 12 hrs of upper division psychology and permission of instructor (Formerly UTN-4940-50-60).

**PSY. 440A Drugs and Behavior (3)** A study of the biomedical, psychosocial and mental health aspects of drugs that affect behavior including alcohol. Substance abuse and treatment modalities will also be emphasized (Formerly UTN-3010 & 3040).

**PSY. 460 B, C, & D Special Topics (3) (3) (3)** Faculty generated topics in psychology. Scope of the subject matter to be determined by instructor. Designed for upper-division students. May be taken more than once (Formerly UTN 4000).

**PSY. 462 Introduction to Psychological Test and Measures (3)** Designed to give the student an understanding of the basic principles underlying psychological measurements, offers training in selection and use of psychological tests and practice in both group and individual testing. An intensive study of individual differences, with emphasis on Intellectual, Personality and Academic Achievement testing. Prerequisite: Descriptive statistics (Formerly UTN 4640).

**PSY. 471 Industrial and Personnel Psychology (3)** Psychology of employee selection, training, proficiency evaluation, motivation

morale and reactions to working conditions. (Formerly UTN 3450).

**PSY. 472 Fields of Applied Psychology (3)** A survey of key areas of the practical application of psychology such as consumer behavior, human engineering, personnel work, clinical treatment, counseling, education, medicine and law. (Formerly UTN 3440).

**PSY. 481 History and Systems of Psychology (3)** Special attention to the historical development of Psychology as a science and the fundamental concepts of various schools of Psychology. The purpose of inductive and deductive research will be explained. (Formerly UTN-4830).

## CENTER FOR TRAINING AND TECHNICAL ASSISTANCE

Barbara A. Nye,  
Director

The Center for Training and Technical Assistance administers projects which provide training and support to service delivery programs for children and families. Four programs are currently located in the Center for T/TA. These programs include services that encompass credit, non-credit, and public service activities. Described below are the projects and programs currently located in the Center for T/TA.

### Head Start State Training Office.

The Head Start State Training Office provides training and technical assistance throughout the State of Tennessee to locally sponsored Head Start grantees. Areas in which training is provided include administration and supervision, fiscal management, educational instruction, social services, parent involvement, health services, and exceptional child services. Training focuses on content, implementation, and interpretation of federal and state policies and regulations that affect Head Start and human service programs in general.

Approximately 8,100 disadvantaged children and families are enrolled in the twenty Head Start grantees in Tennessee. Eighty Tennessee counties offer Head Start programs, and the Center for T/TA staff work with all Tennessee programs. As a part of the TSU mission to serve the state, the Center for T/TA is committed to assist Head Start programs to offer quality services to socio-economically disadvantaged families and to the Head Start concept that emphasizes the prevention of the human dignity of families and children.



**Child Development Associate Training Program**

The Child Development Associate (CDA) Program is a national credentialing effort to improve the quality of performance of individual staff in their role as child caregivers. The program emphasizes competency-based instruction, including supervised field experiences. A full description and list of the CDA courses and program content is located in this catalogue under the Department of Home Economics.

**Exploring Parenting Curriculum**

The Center for Training and Technical Assistance also administers a project to

train program staff to implement the national Exploring Parenting Curriculum. Programs which may participate in training include Head Start, the State Department of Education, the State Department of Mental Health, and other departments and Commissions that impact on service programs to children and families.

**Public Service**

The Center for Training and Technical Assistance administers the Office of Public Service and Non-Credit for the School of Education. Courses, seminars, workshops, and conferences sponsored by the School's faculty and the education com-

munity of a service nature are planned through the Public Service Office. The School awards Continuing Education Units to activities which meet the University's criteria for activities of a public service and non-credit nature. The Office of Public Service works with community groups, schools, educational organizations, state departments, and the faculty to sponsor courses that provide continuing education opportunities for Nashville, the Middle Tennessee region, and state-wide.



# THE SCHOOL OF ENGINEERING AND TECHNOLOGY

**Edward I. Isibor, Ph.D., P.E., Dean**

The School of Engineering and Technology is located in the greatest area of industrial expansion in the Southeast. It is within two hundred miles of the Tennessee Valley Authority and the Atomic Energy Commission's Oak Ridge Plant; within 80 miles of the Arnold Air Development Research Center at Tullahoma, Tennessee; and the Marshall Space center at Huntsville, Alabama; near the foundry and steel mills of Middle Tennessee and Alabama, and in the midst of the largest source of hydro-electric power in the East.

The professional School of Engineering and Technology offers Bachelor of Science degree programs in Architectural Engineering, Civil Engineering, Electrical Engineering, Industrial Arts and Technology with options in Industrial Arts Education, Industrial Technology, Technical Aeronautics, and Transportation Services and Technology, Mechanical Engineering, an Associate of Science degree in Fire Science, and a certificate course in Safety Engineering are also offered by the School.

The school's curricula in these programs are structured to graduate quality engineers capable of taking their places in the mainstream of the engineering profession. The education of our students prepares them to satisfy the manpower needs of industry and with sufficient technical competence to tackle the complex engineering challenges facing our industrialized society.

Engineering is the profession in which a knowledge of the mathematical and natural sciences gained by study, experience and practice is applied with judgement to

develop ways to utilize, economically, the materials and forces of nature for the benefit of mankind. The successful engineer must have mental ability and alertness of a high order; must develop sound judgement; must be willing to try; must recognize failures and keep on trying until he/she arrives at a satisfactory solution to the problem at hand. Therefore, the goals of engineering education at Tennessee State University include the following:

1. familiarizing the student with the systematic engineering approach followed in problem solving
2. providing the student with a strong foundation in engineering fundamentals
3. developing professional attitudes including understanding of the engineering profession
4. developing habits of orderliness, carefulness and objectivity in the student
5. developing an understanding and a sensitivity for the social, economic and environmental implications of various engineering designs in the real world.

Technology has advanced and changed so rapidly over the past few years that the professional team carrying out the engineering function has also changed in composition of responsibility. From the last century when engineers and/or craftsmen made up the team, we now have come to many combinations involving distinct occupational groups such as craftsmen, engineers, scientists, technicians and technologists. It is also projected that between now and the end of the century, society's demands on technically trained persons will range from providing and maintaining interplanetary exploration and travel to solving many earthly problems

pertaining to energy, pollution, transportation, housing, preservation of the environment, and others arising from the continuing increase in population. The demands can be met only by team efforts of both technical and nontechnical persons.

The initial stage in seeking solutions to societal problems ordinarily is a research project seeking basic new knowledge headed by a scientist or engineer. The second stage is often engineering development and design led by an engineer assisted by technologists, technicians and craftsmen. The third stage—usually production, construction and/or operations is increasingly becoming the realm of the technologist, frequently assisted by technicians and craftsmen, sometimes with an engineer as advisor or consultant. The fourth stage of day-to-day operation and maintenance is usually conducted by technicians and craftsmen with a technologist or engineer as supervisor.

The programs of study in Industrial Arts and Technology at Tennessee State University are designed to prepare industrial technologists and teachers of industrial subjects in public schools.

The study of Industrial Arts and Technology provides a greater involvement with "HOW" rather than the "WHY" of scientific principles, theoretical concepts, devices and gadgets. The technologist is typically a practical person interested in the application of engineering principles and in organizing people for efficient industrial production, operation and management.

The American society, having become highly complex and technologically oriented, can maintain its present state—while at the same time further advancements—only through a well educated citizenry. Such an effort requires teams of highly trained and skilled persons. Certainly, these teams of technically-trained workers are needed to adequately interpret, translate and communicate the language of industry to other members of the societal group.

The School of Engineering and Technology instructional programs are located in the following facilities:

1. Engineering Building—This building houses the physical testing, cement and soils, environmental, highway, electrical circuits, electronics, energy conversion, controls, digital logic, combustion engines, refrigeration and air-conditioning, hydraulics, vibrations, noise and model-making laboratories; drafting rooms, classrooms and offices for the departments of Civil, Electrical and Mechanical Engineering. The B.S. in Engineering Program is housed in the downtown facility.



2. Industrial Arts Building—In this building are located the metals, wood technology, building construction, electronics and aeronautics laboratories; one drafting room; classrooms and offices for the departments of Architectural Engineering and Industrial Arts and Technology.
3. Operations Building—The printing technology laboratory is located in this building.

### TUTORIAL CENTER

In order to alleviate academic casualties, the School maintains a tutorial center that is designed to help students in need acquire mastery of course materials. The center is adequately staffed with faculty and selected students to provide assistance to students who are referred to the center.

Students may go to the center for assistance whenever they need help in course work at any time during the hours it is open. Students are normally referred to the center by the instructor using a referral slip. However, if a weakness is detected, the academic advisor can also advise the student to seek help that is available in the center.

The Tutorial Center is located in the Engineering Building in Room E207 and is open from 9 a.m. to 10 p.m., Monday through Friday.

### PRE-ENGINEERING SUMMER INSTITUTE

The School of Engineering and Technology at Tennessee State University conducts a Pre-Engineering Summer Institute directed toward attracting promising high school students who could probably be successful in engineering careers but have deficient high school preparation in some of the required fundamental subjects.

Students selected to participate in the Institute receive 5 weeks of intensive instruction in communication skills, Algebra, Trigonometry and Physical Sciences and participate in problem sessions and field trips to engineering firms, about seven hours per day, five days per week.

At the beginning of the Institute, students are given a pre-test to determine their areas of weakness for diagnostic purposes. Near the close of the Institute, a comprehensive examination is given to determine the level of preparedness of the participants. Students scoring at a satisfactory level are encouraged to enroll in engineering with the possibility to receiving some financial assistance during the Freshman year. Some students scoring below a satisfactory level are encour-

aged to enroll in engineering on a conditional basis. The remaining students are encouraged to enroll in a technology program or other programs available at TSU.

### SCHOLARSHIPS

The School of Engineering and Technology at Tennessee State University grants scholarship awards annually to students with outstanding achievements in high school work. Scholarships available to incoming students cover tuition costs and in many cases, boarding and lodging. The basic criterion for awarding scholarships is the genuine need for financial assistance.

In addition to engineering scholarships, students qualifying for financial aid may receive supplemental assistance in the form of federally funded grants (BEOG, SEOG), loans (NDSL), work-study, work-aid, academic work-aid awards and other scholarships.

Students participating in the work-aid and work-study programs, which involves 5 to 10 hours per week of campus employment can earn between \$268.00 and \$536.00 per semester.

### CO-OPERATIVE EDUCATION PROGRAM (Co-op)

The School of Engineering and Technology at Tennessee State University provides opportunities for students to gain practical experience in industry while at the same time, earn money to finance their education. Under the "Co-op" program, the student devotes alternate semesters to study at the University and work in industry.

Students remain eligible for the program through their junior year. Some companies require that the student maintain a GPA of 2.0 and above out of 4.0 to remain eligible.

The work schedule for students participating in the "Co-op" program will vary slightly from year to year. In general terms, however, each work period will be approximately 4 months in length as follows:

FALL: Around the last week in August to the second week in December  
 SPRING: Around the first week in January to the first week in May  
 SUMMER: Around the first week in May or June to the second week in August

### ADMISSION CRITERIA

The School of Engineering and Technology has some special requirements for admission into its programs beyond the general requirements of the University. These additional requirements are stipulated below.

In order to place sufficient emphasis on English, Mathematics, Physics, and Chemistry for normal progress in engineering education, the students' high school preparation should include:

English .....	4 units
Algebra .....	2 units
Plane and Solid Geometry .....	1/2 unit
Trigonometry .....	1/2 unit
Physics .....	1 unit
Chemistry .....	1 unit
Social Science .....	2 units

An examination of the applicant's high school record will be used to determine admission to the program. The minimum acceptable ACT Score for all entering students is determined from a formula that, based on high school averages, predicts success in engineering and technology. Based on this prediction formula a table has been prepared showing the range within which an acceptable ACT Score and high school average might fall.

High school students who are deficient in one or more of the preparatory subjects may be admitted conditionally but their competency must be established by their scores on the American College Tests (ACT).

Admission requirements to the technology programs offered in the Department of Industrial Arts and Technology in the School of Engineering and Technology are the same as the general admission requirements to the University.

### SPECIFIC SCHOOL GRADUATION REQUIREMENTS

In addition to the University requirements for graduation, the following specific school graduation requirements must be met by engineering students:

1. Freshman students in the School of Engineering and Technology are required to participate in the Freshman Forum during their freshman year.
2. Engineering students will not be permitted to accumulate more than two "D" grades in all required engineering, mathematics, physics and chemistry courses.
3. All engineering students must take the EIT examination prior to graduation.

### ENGINEERING CORE

The following subjects are required in all engineering fields of specialization except for the Bachelor of Science in Engineering program and the Architectural Engineering program.



**MATHEMATICS AND PHYSICAL SCIENCE**

	31 cr. hrs.
Calculus .....	11
Applied Mathematics or Differential Equations .....	3
Probability and Statistics .....	2
General Chemistry .....	4
Introduction of Material Science .....	3
General Physics .....	8

**COMMUNICATIONS**

16 cr. hrs.

English Composition .....	6
Speech .....	3
Technical Report Writing .....	3
Engineering Development .....	1
Engineering Graphics .....	3

**ENGINEERING SCIENCE**

19 cr. hrs.

Computer Science .....	3
Engineering Mechanics .....	6
Thermodynamics .....	3
Circuits I .....	3
Engineering Economics .....	3
Senior Seminar .....	1

**HUMANITIES AND SOCIAL STUDIES**

19 cr. hrs.

American History .....	6
Literature .....	6
Social Studies Electives .....	3
Humanities Electives .....	4

**UNIVERSITY REQUIREMENT**

AFROTC (Air Science or Military Science) or

\*Physical Education .....

Total.....89 cr. hrs.

## INDUSTRIAL ARTS AND TECHNOLOGY GENERAL EDUCATION AND TECHNICAL CORE

**MATHEMATICS AND SCIENCE**

13 cr. hrs.

Mathematics .....	7
Natural Science .....	6

**COMMUNICATIONS**

9 cr. hrs.

English Composition .....	6
Graphics .....	3

**HUMANITIES AND SOCIAL STUDIES**

23 cr. hrs.

American History .....	6
Humanities Elective .....	4
Social Science Electives .....	3
Literature .....	6

**UNIVERSITY REQUIREMENTS AFROTC**  
(Air Science or Military Science) or

\*Physical Education .....

Total.....45 cr. hrs.

**TECHNICAL CORE**

23 cr. hrs.

Graphic Communication .....	6
Orientation .....	2
Electricity .....	3
Industrial and Prod. Mgt. ....	3
Shop Organization and Mgt. ....	3
Industrial Safety .....	3
Job Analysis .....	3
Senior Project .....	2
Senior Seminar .....	1

Total.....68 cr. hrs.

## GENERAL ENGINEERING COURSE DESCRIPTIONS

**ENGR. 100. Engineering Development.**

(1) An introduction to the engineering profession including: nature of engineering; the use of a calculator; techniques in the analysis solution and presentation of engineering problems; lectures by engineers from industry; and inspection trips to local engineering projects. A minor engineering design project is required.

**ENGR. 101. Engineering Computations.**

(2) Introduction to engineering computations; presentation of data; elementary problem solving; use of a calculator and digital computers; treatment of error; empirical methods. Three hours plus open computation lab. Prerequisite: Math 1500. (Formerly UTN course Basic Engineering 1410).

**ENGR. 110. Freshman Forum. (0)** An overview of the University and School's student academic support facilities; academic and non-academic advisement; retention standards.

**ENGR. 111. Engineering Graphics.**

(3) Standard engineering lettering; line and figure drawing with instruments; the correct representation of objects; models; and machine parts in orthographic isometric; and oblique projections, practice in dimensioning and the reading of drawings. Six laboratory hours per week.

**ENGR. 114-5. Fundamentals of Engineering Graphics.**

(2,2) Graphical representation of three-dimensional shape, size and space relationships, graphical analysis of engineering data. A self-study course with tutorial assistance for those who have had high school mechanical drawing and/or related experience. Must be taken in sequence. (formerly UTN courses Graphics 1415-25).

**ENGR. 200. Circuits I. (3)**

Fundamental concepts of charge, current, voltage and power; passive and active circuit elements; Kirchhoff's Laws, Thevenin's and Norton's Theorems; transient and steady state response of RL, RC and RLC circuits. Prerequisite: Math 163. (Formerly UTN 2010 and formerly TSU EE 211.)

**ENGR. 211. Engineering Mechanics I. (3)**

Statics of particles; statics of rigid bodies in two dimensions; statics of rigid bodies in three dimensions; centroids and centers of gravity; friction and moments of inertia. Prerequisite: Math 262.

**ENGR. 212. Engineering Mechanics II.**

(3) Kinematics of particles, kinetics of particles including force, mass and acceleration; work and energy; impulse and momentum; kinematics of rigid bodies including force and acceleration. Introduction to mechanical vibrations. Prerequisites: ENGR 211 and Math 341.

**ENGR. 213. Statics. ENGR. 213L.**

(3,1) Forces, moments, resultants of force and moment systems; static equilibrium, two and three dimensional vector analysis; three hours lecture, three hours lab per week. Coreq: Math 164. (Formerly UTN courses Basic Engineering 1310 and Engineering Mechanics 2720).

**ENGR 214. Dynamics. ENGR. 214L.**

(3,1) Displacements; particle kinematics and projectile motion; kinetics of particles using Newton's Laws; frictional forces; impulse-momentum. Required of all engineering students. Three hours and one three hour lab weekly. Prerequisite: ENGR 213, Corequisite: Math 164. (Formerly UTN course Basic Engineering 1320 and Engineering Mechanics 2720).

**ENGR. 215. Basic Dynamics. ENGR. 215L.**

(2,1) Work and kinetic energy; temperature and heat transfer; first laws of thermodynamics, kinetic theory of gases. Required of all engineering students. Three hours and one three hour lab weekly. Prerequisite: ENGR 214, Corequisite: Math 164. (Formerly UTN course Basic Engineering 1330).

**ENGR. 220. Computer Science. (2)**

A basic course in computer problem solving utilizing algorithms and the FORTRAN language. Included is familiarization with large-scale computer systems, descriptions of different languages, and actual usage of pre-written programs and subroutines, as well as development of new programs for their own use. Prerequisites: Math 163 and ENGR 100. Note: To be taken in conjunction with ENGR 220L.

**ENGR. 220L. Computer Science Lab. (1)**

Practical use and development of programming skills and actual case studies. Includes statement coding, flow charting, debugging, and running of actual student programs. Note: To be taken in conjunction with ENGR 220.

**ENGR. 230. Introduction to Materials Science. (3)**

An introductory course on properties of materials, selection of materials, structure of crystalline and non-crystalline solids; mechanical behavior; electronic behavior, chemical behavior, stability and failure. Prerequisites: Chemistry 121, Math 164, Physics 221.

**ENGR. 301. Thermodynamics I. (3)**

An introduction to the nature and domain of thermodynamics; the Zeroth Law; properties and states of pure substances; work and heat; the First Law applied to both open and closed systems; general observations and statements of the Second Law; the inequality of Clausius and entropy changes for closed and open systems; vapor power and refrigeration cycles. Prerequisite: Physics 221.

**ENGR. 303. Applied Mathematics I. (3)**

Solution of ordinary differential equations by classical and Laplace Transform techniques. Applications to problems from engineering systems, including electrical circuits and mechanical vibration models. Prerequisite: Math 341.



**ENGR. 304. Applied Math II. (3)** Introduction to complex analysis and boundary value problems and introduction to complex analysis. Prerequisite: Engr. 303.

**ENGR. 314-5. Fluid Mechanics. (2)** Basic laws of fluid mechanics; effects of viscosity and compressibility; empirical analysis; Navier-Stokes equations; boundary-layer concepts; fluid flow measurement; turbo-machinery. Three 3-hour labs in 314. Prerequisites: Engr. 214, Math 342. (Formerly UTN courses ENGR Mechanics 3110-20).

**ENGR. 330. Analog Computers. (3)** Basic principles and techniques employed in the simulation of physical systems and controls. Analysis of dynamic systems; use of operational amplifiers, multipliers and function generators. Prerequisite: Math 462. (Formerly UTN course EE 4610).

**ENGR. 331. Mechanics of Materials. (3)** Concepts of stress and strain; stress-strain relations and Mohr's circle; forces and displacements in thin-walled pressure vessels and determinate beams. Three hour lecture. Prerequisite: ENGR 213. (Formerly UTN course ENGR Mechanics 3310).

**ENGR. 340. Numerical Methods in Engineering. (3)** Numerical solutions of systems of linear and non-linear equations; numerical differentiation and integrational; numerical solutions of ordinary and partial differential equations. Prerequisite: Math 462.

**ENGR. 345. Statistics for Engineering. (3)** Survey of statistical methods with special application for engineering students; frequency distributions, selected sampling distributions; some tests of significance, introduction to linear regression. Cannot be taken for credit by students who have credit for UTN courses Statistics 2210-20. Prerequisite: Math 341. (Formerly UTN course ENGR 3450).

**ENGR. 400. Senior Seminar. (1)** Introduction to systems approach and system engineering; discussion of engineering case studies; professionalism in engineering; professional ethics; professional registration; professional development activities; engineers in industry; interdisciplinary design in engineering. Prerequisite: Senior standing.

**ENGR. 404. Manufacturing Materials and Processes. (3)** Study of the characteristics of various manufacturing materials and techniques common to industrial manufacturing processes. Three hours including bi-weekly lab. Prerequisite: ENGR 331. (Formerly UTN course ENGR 4040 and ENGR 2110).

**ENGR. 410. Introduction to Non-Linear Optimization. (3)** This course will deal with the fundamentals, techniques and applications of non-linear programming. It will cover both one dimension and multi-dimensional search techniques and also direct and indirect gradient methods. Both unconstrained and constrained programming methods will be studied. Prerequisite: Senior Standing.

**ENGR. 411-A, B, C, D, E, F, G, H. Special Topics in Engineering. (3)\*** Special subjects presented to cover current problems of unique advances in the state of the art. Prerequisite: Senior standing. (Formerly UTN course ME 4910-20-30).

**ENGR. 414. Engineering Design. (2)** Integration of ideas, concepts and fundamentals of engineering into design, involving analysis and synthesis of technical, human and economic factors. Students work in multidisciplinary teams. Prerequisite: Within two semesters of graduation. May be repeated for credit once. (Formerly UTN course ENGR 4000).

**ENGR. 415. Energy Conversion Systems. (3)** Economic and technical design parameters as applied to power plants for public utilities or industrial applications. (Formerly UTN course ENGR 4150).

**ENGR 420. Engineer in Training License Review. (0)** A course designed to prepare student for the EIT examination, a partial requirement for obtaining license as a professional engineer. Prerequisite: Senior standing.

**ENGR. 423. Legal and Ethical Aspects of Engineering. (2)** Legal principles underlying engineering practice; laws of contracts, torts, agency, real property, problems of professional registration and ethics. (Formerly UTN course ENGR 4230).

**ENGR. 430. Engineering Economics. (3)** Economic factors involved in the acquisition and retirement of capital goods in engineering practice including: interest and capitalization methods of depreciation; amortization, sinking funds; cost and rate determination. Prerequisites: ECON 211 and Junior standing.

**ENGR. 440. Probability and Statistics. (2)** Statistics and engineering; probability; probability distributions; Chebyshev's theorem; normal distribution; applications to operations research; treatment of data; hypothesis testing; method of least squares; regression; applications to engineering problems. Prerequisite: Math 341.

**ENGR. 450. Senior Project. (2)** A theoretical or experimental project in Special Topics in various fields of engineering coupled with a technical report and a seminar. Prerequisite: Senior Standing.

**ENGR 491. Special Topics. (3)** Problems relating to recent developments and current practice in various fields of engineering. Prerequisite: Consent of the instructor. (Formerly UTN course ENGR. 4910)

**\*ENGR. 411-A, B, C, D, E, F, G, H** refer to special topics in the department of Architectural Engineering, Civil Engineering, Electrical Engineering, Industrial Arts and Technology, Mechanical, Computer Science, Industrial Engineering and Safety Engineering respectively.

# DEPARTMENT OF ARCHITECTURAL ENGINEERING

**Hinton C. Jones, Jr.,  
Acting Head**

The Department of Architectural Engineering offers a course of study leading toward a Bachelor of Science degree in Architectural Engineering. The four-year curriculum provides a study of architectural, environmental, and structural design of all building types. The program emphasizes the combined fundamentals of architectural aesthetics with the scientific and engineering aspects of planning, design, and construction of buildings.

A background of architectural subjects, such as architectural design, materials of construction, building equipment, office practice, and ethics form the basic nucleus of the architectural disciplines.

A full range of engineering and structural courses in steel and concrete, with elements such as floor systems, columns, foundations, statically determinate and indeterminate framework, girders, and trusses make possible an understanding of the fundamental principles of engineering.

Unusual opportunities are available through close contact with the many other engineering courses and research programs offered by the School. The Architectural Engineering curriculum integrates these technical resources with social and cultural needs.

The graduate will find many opportunities for employment with private firms, industrial establishments or governmental agencies. With additional years of experience, the graduate architectural engineer may engage in private practice after meeting registration requirements of the state in which he/she desires to practice. Minimum semester hours required for the Bachelor of Science degree in Architectural Engineering are 141 hours.

## DEGREE REQUIREMENTS

GENERAL CORE	83 Cr. Hrs.
Technical Electives	3
Architectural Engineering Core	
Architectural Design	12
History of Architecture	6
Strength of Materials	3
Theory of Structures	5
Materials and Construction	3
Working Drawings	3
Environmental Engineering Systems	3
Senior Project	2
Building Equipment	3
Administrative Services	3



Reinforced Concrete Design .....	3
Surveying .....	3
Structural Design in Metals .....	3
Soil Mechanics .....	3
Total Credit Hours required .....	141

The Architectural Engineering technical electives are to be selected from the following courses:

1. Urban Planning AE 320
  2. Photography AE 330-331
  3. Aesthetics in Architecture AE 433
- The Humanities electives may be chosen from the following areas: (A combination of any two fields).

Philosophy (Introduction to Philosophy- PHIL 301)  
 Music Music Appreciation Mus. 131  
 Art Art History I and II, Art 331-332  
 Drama History of Drama I Dr 301

### CURRICULUM FOR MAJOR IN ARCHITECTURAL ENGINEERING

FRESHMAN YEAR	Credit Hours	
	Fall	Spring
MATH 163, 164 .....	4	4
CHEM 121; SPCH 220 .....	3	3
CHEM 121L; ENGR 100 .....	1	1
ENGR 111, 200 .....	3	3
ENG 101, 102 .....	3	3
PE or AFROTC .....	1	1
Social Science Elective .....		3
	15	18
SOPHOMORE YEAR	Credit Hours	
	Fall	Spring
MATH 341; ENGR 230 .....	3	3
PHY 221, 222 .....	3	3
PHY 221L, 222L .....	1	1
ENGR 211; CE 211 .....	3	3
AE 201, 202 .....	3	3
HUM ELECTIVE .....	2	2
ENGR 220, ENG. 310 .....	2	3
ENGR 220L .....	1	
PE or AFROTC .....	1	1
	19	19
JUNIOR YEAR	Credit Hours	
	Fall	Spring
AE 301, 302 .....	3	3
CE 341, 442 .....	3	2
ENGR. 301; ENGR 303 .....	3	3
ENG 211, 212 .....	3	3
CE 313; AE 312 .....	3	3
HIST 201, 202 .....	3	3
	18	17
SENIOR YEAR	Credit Hours	
	Fall	Spring
AE 431, 432 .....	3	3
ENGR 450, AE 411 .....	2	3
AE 441, 442 .....	3	3
CE 302; AE 430 .....	3	3
CE 342; TECH ELECT .....	3	3
ENGR 400, 440 .....	1	2
CE 343 .....	3	
	18	17

Minimum credits required for the B.S. degree—141, semester hours.

### COURSE DESCRIPTIONS

**AE 201. Architectural Design I. (3)** Introduction to architectural design; expressions of principles in structural and aesthetic relationship. Lecture, 3 hours; Lab, 6 hours. Prerequisite: ENGR 111.

**AE 202. Architectural Design II. (3)** Problems of more complex nature involving principles, materials, space concepts and site relationship. Emphasizing design and the use of materials in the development of creative activity. Lecture, 3 hours. Prerequisite: AE 201.

**AE 206. Introduction to Building Inspection. (2)** General description of the building inspection profession, job responsibilities, job requirements, inspection techniques, and the types of institutions or agencies that utilize the services of building inspectors. (Formerly UTN course Architecture 2006).

**AE 211. Engineering Graphics II. (Descriptive Geometry). (3)** Curved surfaces, their tangent lines and planes; the intersection of surfaces, developments, shades and shadows. Perspective. Prerequisite: ENGR 111.

**AE 230. Materials and Processes. (3)** Architectural materials and manufacturing processes. Field trips to construction sites and factories. Prefabrication. Industrial design of building components. (Formerly UTN courses Architecture 2310-20).

**AE 260. Art of Architecture. (3)** Visual expression and communication of ideas of architecture. (Formerly UTN courses Architecture 2600).

**AE 270. Structure in Architecture. (3)** Fundamentals of architectural design, materials and structure. Includes architectural forms; emphasis on modern architectural and structural systems, such as beams, columns, membranes, plates, shells, cables and arches. Case studies of outstanding European and American architectural projects. (Formerly UTN course Architecture 2700.)

**AE 301. Architectural Design III. (3)** The design of architectural problems of a complex nature involving principles of organic order and the use of structural elements, site relationship, form and logical concepts of space and the process of architectural composition. Problems in planning with close coordination of site, materials, human needs and structural harmony. Lecture 2 hours; Lab, 6 hours. Prerequisites: AE 201-202.

**AE 302. Architectural Design IV. (3)** A continuation of Architectural Engineering 301, principles applied in a series of more complex problems, each problem presented on a design need covering the whole field of architectural procedures. Lecture, 2 hours; Lab, 6 hours. Prerequisite: AE 301.

**AE 312. Working Drawings. (3)** Graphical presentation of building material assembly, construction methods, framing systems and details. Prerequisite: AE 202.

**AE 320. Urban Planning. (3)** Planning fundamentals; objectives and scope of urban planning; theories of land use patterns; population studies, regression and other quantitative analysis; cohorts survival technique.

**AE 330. Basic Photography. (3)** Fundamental and creative uses of the camera, including controls, lenses, film and other accessories and basic darkroom procedures.

**AE 331. Advanced Photography. (3)** A continuation of the fundamental techniques and scope of photographic exploration. Emphasis on individual projects involving creative editing, light and luminance, and exhibition techniques. Prerequisite: AE 330 or prior experience.

**AE 411. Materials and Construction. (3)** Prefabricated building materials, manufacturing processes, characteristics of new and old materials; emphasis on relationship between common use of materials and imagination; techniques directed toward limitations and potentialities. Lecture, 1 hour; Lab 2 hours. Prerequisite: ENGR 230.

**AE 430. Administrative Services. (3)** Principles and methods of cost analysis of material, labor, and equipment production cost for the building trades. Conduct of office practice, organization, contracts, legal and ethical problems; specification writing, estimating and supervision of construction. Prerequisite: Senior Standing.

**AE 431. Architectural History. (3)** Materials and forms of architectural and related arts of the past and present, including emphasis on social, religious, and political life. Prerequisites: AE 201-202.

**AE 432. Architectural History. (3)** Continuation of Architectural History, AE 431.

**AE 433. Aesthetics in Architecture. (3)** Architecture among the arts; theory and philosophy of space, imagination, design and materials. (Formerly UTN course Architecture 4320.)

**AE 441. Building Equipment. (3)** The selection, use and design of mechanical equipment for buildings; problems involving cost, maintenance and purchasing of standard and custom design equipment. Prerequisite: AE 312.

**AE 442. Environmental Engineering Systems. (3)** Design and layout of heating and air-conditioning systems, illumination and wiring practice, water supply and treatment, drainage and sewage disposal systems. Prerequisite: Physics 222.

## DEPARTMENT OF CIVIL ENGINEERING

### Michael Samuchin, Ph.D., Head

The Department of Civil Engineering offers a well balanced program in engineering education that encompasses all of the major components of civil engineering activities. The students are exposed to use of materials, the structural design of buildings, bridges, and dams, design of transportation systems, planning and design of water supply and sanitary systems, and techniques to curb air and water pollution.



The Department has developed a close relationship with industry to provide students majoring in civil engineering with real life job experiences in the civil engineering profession.

DEGREE REQUIREMENTS

Course requirements for all engineering students	89 credit hours
Technical Elective	5
Civil Engineering Core	
Surveying	3
Strength of Materials	6
Fluid Mechanics and Hydraulics	5
Steel and Reinforced Concrete Design	6
Soil Mechanics and Foundation Engineering	5
Environmental Engineering and Water Resources	5
Transportation	3
Structural Testing	1
Structural Analysis	5
Senior Project	2
Total credit hours required	135

CURRICULUM FOR MAJOR IN CIVIL ENGINEERING

FRESHMAN YEAR	Credit Hours	
	Fall	Spring
HIST 201		3
MATH 163, 164	4	4
CHEM 121	4	
ENGR 100	1	
ENGR 111, 230	3	3
ENG 101, 102	3	3
PE or AERO	1	1
EC 211		3
	16	17
SOPHOMORE YEAR	Credit Hours	
	Fall	Spring
MATH 341; ENGR 303	3	3
PHY 221, 222	4	4
ENGR 211, 212	3	3
HIST 202; CE 211	3	3
PE or AFROTC	1	1
ENGR 220	3	
SPCH 220		3
	17	17
JUNIOR YEAR	Credit Hours	
	Fall	Spring
HUM ELECTIVE	2	2
ENG 211		3
ENGR 200, 301	3	3
CE 302		3
CE 310, 311	3	2
CE 312; ENG 310	3	
CE 341, 340	3	1
CE 313, 444	3	2
	17	16
SENIOR YEAR	Credit Hours	
	Fall	Spring
ENG 212		3
CE 322, 421	3	2
CE 342, 442	3	2
CE 332; ENGR 430	3	3
CE 343; ENGR 440	3	2
TECH EL (300-400 Level)	3	2
ENG 310; ENGR 400	3	1
ENGR 450		2
	18	17

COURSE DESCRIPTIONS

**CE. 211. Strength of Materials. (3)** Concepts of stress and strain; stress-strain relations; stresses, strains and displacements in trusses; shafts and determinate beams. Three hours lecture. Prerequisite: ENGR. 211 (Formerly UTN ENGR. 3310).

**CE. 302. Surveying. (3)** Use of surveying instruments in construction surveying, including alignment, grades and layout of buildings; field note procedure, leveling and measuring at angles; measurement of distance by tape and stadia, design, calculation and layout of circular, spiral and vertical curves. Two lectures and two hours lab per week. Prerequisite: Math 261 (Formerly UTN ENGR. 3360)

**CE. 310. Fluid Mechanics. (3)** Basic laws of fluid mechanics; effects of viscosity and compressibility; empirical analysis; Navier-Stokes equations; boundary-layer concepts; fluid measurement; turbomachinery. Prerequisite: Eng. 211 (Formerly UTN ENGR. 3110).

**CE. 311. Hydraulics. (2)** Application of basic and developed principles of fluid mechanics to water. Flow measurements, flow in closed conduits, uniform and non-uniform open channel flow; pumps and turbines; basic hydrodynamics; flow similitude and models. Prerequisite: CE 310 (Formerly UTN ENVIR 3120).

**CE. 312. Advanced Strength of Materials. (3)** Compound stresses, stress and strain transformation, statically indeterminate problems and elastic stability of columns. Prerequisite: CE 311.

**CE. 313. Soil Mechanics. (3)** Principles of Soil Mechanics, index properties of soil, particle size and gradation. Soil identification and classification, Atterberg limits, soil structures, permeability of soils, capillarity and frost action in soils, concept of effective stress in soils, stress distribution in soils, compaction of soils, shear strength and settlement of soils. Two lectures and two hour labs per week. Prerequisite: CE 211 (Formerly UTN CE 4450).

**CE. 322. Water Supply. (3)** Planning of water supply system, population estimation, industrial and municipal water demand, hydrologic considerations of surface and ground water sources, design of distribution systems and impoundment works, water quality criteria and water treatment processes and operations. Prerequisite: CE 311 (Formerly UTN ENVIR 4210).

**CE. 332. Transportation. (3)** To introduce the student to rural and urban transportation problems and perspectives using the planning process in establishing existing travel patterns, modeling of demand, proposing alternatives, evaluation procedures, and plan implementation. To introduce the basic fundamentals for the design, construction and maintenance and operation of various transportation modes, their guideways and terminals. Prerequisites: CE 302 and CE 211.

**CE. 333. Elementary Hydrology. (3)** Elements of hydrology including both descriptive and quantitative aspects. Prerequisite: ENGR. 311. (Formerly UTN course ENVIR ENGR 3330).

**CE. 340. Structural Testing. (1)** Laboratory course dealing with the measurement of the engineering properties of construction materials. Prerequisite: CE 211.

**CE. 341. Theory of Structures I. (3)** Reactions; moments, shears and stresses in determinate trusses and framed structures from fixed and wind loads; influences lines. Three hours lecture. Prerequisite: CE 211 (Formerly UTN 3210).

**CE. 342. Reinforced Concrete Design. (3)** Behavior and design of rectangular and T-sections in bending and shear, bounding stress and development of reinforcement, design of footings and one-way slabs. Prerequisite: CE 341.

**CE. 343. Steel Design. (3)** The analysis and design of structural elements and connections for buildings, bridges and specialized structures, including: roof and bridge trusses, plate girders and built-up columns, and main compression members. Prerequisite: CE 341.

**CE. 360. Transportation Planning. (4)** To introduce the student to rural and urban transportation problems and perspectives using the planning process in establishing existing travel patterns, modeling of demand, proposing alternatives, evaluation procedures, and plan implementation. To introduce the basic fundamentals for the design, construction and maintenance and operation of various transportation modes, their guideways and terminals. Prerequisite: Junior standing. (Formerly UTN course Civil Engineering 3600).

**CE. 400. Unit Operations of Environmental Pollution Control. (2)** Physical unit operations and chemical unit processes employed in air, land and water pollution control activities. Theoretical development of design models and evaluation of functional performances. Topics include mixing, sedimentation, filtration, mass transfer, and absorption. Prerequisite: ENGR. 423 (Formerly UTN course Environmental Engineering 4000).

**CE. 403. Man and His Environment. (3)** A study of the interaction of technology with environment, including air, water, natural resources and life support systems. Causes, analysis, and measurement of pollution. Survey of pollution control devices, systems and concepts and current research. Open to all upper division university students. (Formerly UTN ENVIR. 4320).

**CE. 421. Wastewater Treatment. (2)** Theory and design of wastewater collection, treatment and disposal. Effects of pollution on the environment. Prerequisite: CHEM 121.

**CE. 423. Environmental Engineering Laboratory. (3)** Water chemistry and water microbiology, unit operations and processes involved in water and sewage treatment, industrial waste treatment, solid waste treatment and disposal, air pollution control, noise control. Prerequisite: CHEM 121.

**CE. 431. Traffic Control. (3)** Study of traffic congestion, road and street capacity, regulation of moving traffic, signs and signals, traffic courts, traffic laws and regulations, traffic accidents and street modifications. Prerequisite: CE 332 (Formerly UTN CE 4640).



**CE. 432. Highway Engineering. (3)** To introduce the student to the concepts of design, construction, operation and maintenance of highway facilities, including the integration and application of various engineering principles and techniques of a comprehensive team project with lectures, labs and role playing. Prerequisite: CE 322. (Formerly UTN CE 341.)

**CE. 442. Theory of Structures II. (2)** Classical techniques of indeterminate structural analysis including slope deflection and moment distribution. Prerequisite: CE 341.

**CE. 443. Advanced Reinforced Concrete Design. (3)** Floor slab systems including flat slabs and two-way slabs, integrated building unit analysis and design, retaining walls and introduction to prestressed concrete. Prerequisite: CE 342.

**CE. 444. Foundation Engineering. (2)** Lateral earth pressure; retaining walls, shallow foundations, and bearing capacity of soils, spread and combined footings, raft foundations; deep foundations, piles, caissons and piers. Prerequisites: CE 312, CE 313.

**CE. 449. Advanced Steel Design. (3)** Design of complete structures. Introduction to plastic design concepts. Prerequisites: CE 342, CE 343.

**CE. 454. Computer Utilization. (3)** Computer use, the economic justification, and the extent of its uses by industry. The utilization of computers for the solution of civil engineering problems. Prerequisite: CE 341. (Formerly UTN CE 4550).

**CE. 455. Engineering Behavior of Soils. (3)** Plastic and elastic behavior of soils, determination and use of engineering properties of in-situ soils. Two hours lectures, three hours lab. (Formerly UTN CE 4550).

**CE. 456. Stabilization of Soils. (3)** Mechanical stabilization of soils by compaction, drainage, and blending; chemical stabilization of soils with admixtures; water-proofing and modifying soils with additives. Two hours lecture, three hours lab. Prerequisite: CE 313. (Formerly UTN CE 4560).

**CE. 460. Solid Waste Management. (3)** Quantities and characteristics of solid wastes; collection methods and equipment; disposal and recycle techniques; economics; planning and management. An introductory course on the concepts of air pollution; analysis of the relationship among emission sources, meteorology and topographic factors and adverse effects on receptors. Engineering approaches for air pollution control. Prerequisite: ENVIR. 432 and Senior standing. (Formerly UTN Environmental Engineering 4600).

**CE. 462. Airport Planning and Design. (3)** To introduce the student to the airport design process, including airport master planning process; air site considerations, including runway configuration, capacity, geometrics, and lighting, land site considerations, including terminal layout and design, and ground access systems and parking. Prerequisites: CE 302, 332. (Formerly taught at UTN as Special Topics, CE 4910, 20 or 30.)

**CE. 464. Traffic Engineering. (3)** Study of traffic congestion, road and street capacity, regulations, pedestrian control, traffic signs, and signals, traffic courts, traffic laws and regulations, traffic accidents, and street modifications. Prerequisite: CE 332 (Formerly UTN CE 4640).

# DEPARTMENT OF ELECTRICAL ENGINEERING

Satinderpaul S. Devgan,  
Ph.D., P.E., Head

This department offers a major program leading to the Bachelor of Science degree in Electrical Engineering. Also the Department offers two service courses in circuits and circuits and devices for non-majors.

The Department of Electrical Engineering offers basic courses in the following areas: Control Systems, Digital Systems, Communication Systems Theory, Electronics, Electromagnetic Theory, Energy Conversion, Electrical Circuits, Network Theory and Power Systems. Specializations in any of the above areas is provided through a choice of technical electives.

## DEGREE REQUIREMENTS

Core Requirements for all engineering students	89 Credit Hours
Technical Electives	9
Electrical Engineering core	
Electrical Circuits II (EE-212, 212L)	4
Electronics I and II (EE-331, 332, 331L, 332L)	8
Linear Systems (EE-320)	3
Electromagnetic Theory I (EE-321)	3
Energy Conversion I (EE 341, 341L)	4
Power Systems (EE-342)	3
Communication Systems (EE-350)	3
Control Systems I (EE-400, 400L)	4
Digital Logics (EE-310, 310L)	4
Senior Project (ENGR. 450)	2
	136

The technical electives, courses at the 300 level or above, may be chosen from the following courses only, except in specially approved cases or as approved by the advisor.

- Physics 361—Solid State Physics (3)
- EE 322—Electromagnetic Theory II (3)
- EE 401—Control Systems II (3)
- EE 430—Digital Computer Structures (3)
- EE 454—Antennas (3)
- EE 480—Introduction to Microprocessors (3)
- ENGR 330—Analog Computers (3)
- ENGR 340—Numerical Methods in Engineering (3)
- ENGR 410—Introduction to Non-Linear Optimization

The Humanities Electives may be chosen from two of the following fields:

- Philosophy
- Music
- Art
- Drama

## CURRICULUM FOR MAJOR IN ELECTRICAL ENGINEERING

FRESHMAN YEAR	Credit Hours	
	Fall	Spring
MATH 163, 164	4	4
CHEM 121; ECON 211	3	3
CHEM 121L; ENGR 100	1	1
SPCH 220; ENGR 111	3	3
ENG 101, 102	3	3
PE or AERO	1	1
HUM ELECT		2
	15	17

SOPHOMORE YEAR	Credit Hours	
	Fall	Spring
MATH 341; ENGR 303	3	3
PHY 221, 222	3	3
PHY 211L, 222L	1	1
ENGR 200, EE 212	3	3
ENGR 220, 230	2	3
ENG 310; HIST 201	3	3
PE or AERO	1	1
ENGR 220L; EE 212L	1	1
	17	18

JUNIOR YEAR	Credit Hours	
	Fall	Spring
EE 331, 332	3	3
EE 331L, 332L	1	1
EE 341, HIST. 202	3	3
EE 310; E.E. 341L	3	1
EE 310L	1	
ENGR 211, 212	3	3
EE 320, 321	3	3
ENG 211		3
	17	17

SENIOR YEAR	Credit Hours	
	Fall	Spring
EE 400, 350	3	3
EE 400L		1
ENGR 430; E.E. 342	3	3
TECH Elect (300-400 level)	3	6
ENGR 450; ENG 212	2	3
HUM Electives	2	
ENGR 400	1	
ENGR 301, 440	3	2
	17	18

## COURSE DESCRIPTIONS

**EE. 200. Circuits I. (3)** Fundamental concepts of charge, current, voltage, power; passive, active circuit elements; Kirchhoff's law, mesh and node analysis, super-position; Thevenin's and Norton's Theorems; transient and steady state response of RL, RC and RLC circuits. Prerequisites: Math 262. Three hours includes six labs. (Formerly UTN EE 2010).

**EE. 201. Circuits II. (3)** Phasors and concepts of impedance, poles, and zeroes. Steady state AC circuits, polyphase circuits and general network theorems; series and parallel resonance; magnetically coupled circuits; one and two port networks. Prerequisite: EE 200. Three hours includes six labs. (Formerly UTN EE 2020).



**EE. 212, 212L. Circuits II (4)** Phasors and concepts of impedance, poles, and zeroes. Steady state AC circuits, polyphase circuits and general network theorems; series and parallel resonance; magnetically coupled circuits; one and two port networks. Prerequisite: ENGR 200. Lecture: 3 credit. Laboratory: 1 credit. (Formerly UTN EE 2120).

**EE. 310, 310L. Design of Digital Logic Systems. (4)** This course is for those who want to know how logic circuits can be put together to form working digital computing systems. Among the topics included in this course are: Overview of computing; combinational and sequential logic circuit design, analysis and minimization; computing circuits; control circuits. Prerequisite: EE 212; Lecture: 3 credits; Laboratory : 1 credit.

**EE. 312, 312L. Circuits and Devices. (4)** General network theorems, electronic devices, transistors and amplifiers, linear models of diodes and applications, logic circuits and digital devices, magnetically coupled circuits and transformers, electromechanical devices, and new methods of direct energy conversion. Prerequisite: ENGR 200. Lecture: 3 credits; Laboratory: 1 credit.

**EE. 320. Linear Systems. (3)** Fourier series and Fourier integral, Laplace transform, and its applications. Network analysis by methods of tie-sets and cutsets. State variables, dynamic equations, state equations of networks, signal flow graphs. Prerequisite: EE 212.

**EE. 321. Electromagnetic Theory I. (3)** Vector analysis, vector algebra, coordinate system and transformations. Coulumb's Law, E and D fields, Gauss's law, Divergence. Bio-Savart Law, Ampere's Law, B and H fields, stokes, theorem, Magnetic Boundary Conditions. Prerequisite: Junior standing.

**EE. 322. Electromagnetic Theory II. (3)** Poisson and Laplace equations, time varying fields and Maxwell's equations, applications of electromagnetic theory to transmission lines, uniform plane waves, standing wave ratio, wave guide structures, microwave devices and antennas. Bi-weekly laboratory. Prerequisite: EE 321.

**EE. 331, 331L. Electronics I. (4)** Diode characteristics, real, ideal and piecewise linear models; transistor circuit biasing and stability analysis; small signal analysis of basic transistor amplifiers; AC and DC analysis of multiple transistor circuits. Prerequisite: EE 212. Lecture 3 credits; Laboratory: 1 credit.

**EE. 332, 332L. Electronics II. (4)** Analysis and design of feedback and power amplifiers; field effect transistor amplifiers; audio frequency amplifier frequency analysis; high frequency analysis of transistor amplifiers; Nyquist, Bode and pole-zero analysis. Prerequisite: EE 331. Lecture: 3 credits; Laboratory: 1 credit.

**EE. 341-341L. Energy Conversion I. (4)** Magnetic circuits, single phase and three phase transformers, essentials of voltage and torque equations as applied to electromechanical energy conversion devices. Theory, analysis, performance and applications of DC machines, synchronous machines and induction motors. Prerequisite: EE 212. Corequisite: EE 320; lecture: 3 credits. Laboratory: 1 credit. (formerly UTN EE 3080).

**EE. 342. Power Systems. (3)** System model representation of synchronous machines, transformers and short, medium and long transmission lines. Per unit representations. Symmetrical components, symmetrical and unsymmetrical faults, load flow analysis. Prerequisite: EE 341.

**EE. 350. Communication System. (3)** Spectral analysis, filters, amplitude modulation, frequency modulation, phase modulation, pulse amplitude and time modulation, pulse code modulation and delta modulation. Emphasis is on band width requirements for these systems, as well as explanation of modulating, transmitting, receiving and demodulating circuits. Prerequisite: EE 320.

**EE. 381. Electronics I. (3)** Solid state physics, current conduction in semiconductors, theory of p-n junctions, characteristics and equivalent circuits of FET and bipolar transistors; single stage and multistage amplifiers; integrated circuit technology overview. Prerequisite: EE 201. Three hours includes six labs. (Formerly UTN EE 3810).

**EE. 382 Electronics II. (3)** Analysis and design of power amplifiers; analysis of multistage amplifiers, including frequency response; tuned amplifiers; feedback. Prerequisite: EE 381. Three hours includes six labs. (Formerly UTN EE 3820).

**EE. 400, 400L. Control Systems I. (4)** Classical Control System design and analysis; transfer functions of electrical mechanical and electromechanical systems; responses of second order system sensitivity, steady state error and transient analysis; stability analysis with Nyquist, Bode and root locus plots; design of cascade and feedback compensation. Prerequisites: EE 320, EE 341; Lectures: 3 credits; Laboratory: 1 credit.

**EE. 401. Control Systems II. (3)** Modern control system design and analysis using state variable methods; analysis of non-linear control systems using plane and describing function methods; Popov's methods; introduction of optimal control theory and applications; controllability and observability; Pontryagin's maximum principle and its application. Prerequisite: EE 400.

**EE. 430 Digital Computer Structures. (3)** This course is composed of readings which are descriptions of the major computer systems in use today. At least, one micro-computer, one mini computer, one standard computer, and one super-computer will be discussed and analyzed. Analysis includes size, input-output capacity, speed and the physical connection and operation of the various parts of a computer. Prerequisite: EE 310, ENGR 220.

**EE. 454. Antennas. (2)** Radiation, hertzian dipole, linear antennas, antenna gain and impedance, antenna arrays, other simple antenna types. Prerequisite: EE 321. (Formerly UTN EE 4540).

**EE. 480. Introduction to Microprocessors. (3)** Topics served include: number systems microprocessing hardware, memory, addressing, instructions, peripheral interfacing and programming problems. Prerequisite: ENGR 220, EE 310.

**DEPARTMENT OF  
MECHANICAL  
ENGINEERING**  
**Yvonne Y. Clark.,  
M.S., P.E., Head**

The Mechanical Engineering Program offers a comprehensive course of study in which the fundamentals of engineering are taught and a broad foundation is established for the pursuit of specialized areas in this field. Students may orient their programs toward the thermal sciences, machine design, metallurgy or Industrial Engineering. In this current era, when efficient and economical means of energy production is an international concern, the mechanical engineer is in the forefront to meet this challenge. Mechanical engineers are concerned with the production, transmission and use of energy. They design and develop machines that produce power, such as internal combustion engines, steam and gas turbines, jet and rocket engines and nuclear reactors. Also, their task is to design and develop machines that use power, such as refrigeration systems, air conditioning equipment and machine tools. Various specialized areas of work have been developed within this field, and since mechanical engineers are employed in nearly all industries, their work varies with the industry and functions performed. Among these specialties are motor vehicles, marine equipment, steam power, heating, air-conditioning, instrumentation and machines for specialized industries, such as petroleum, rubber and plastics and construction.

Mechanical engineers are involved in the whole industrial spectrum from research, development, testing and design work to administrative and management activities. The field is open and in great need of young minds with new ideas.

The Department offers a major program leading to the Bachelor of Science in Mechanical Engineering. Degree requirements are listed below:

**DEGREE REQUIREMENTS**

Engineering Core Requirements	89 Credit Hours
Technical Electives	6 Credit Hours
Department Core Requirements	

Strength of Materials, CE 211, 312	6 Credit Hours
Fluid Mechanics, CE 310	3 Credit Hours
Circuits and Devices, EE 312	4 Credit Hours
Thermodynamics II, ME 302	3 Credit Hours
Materials Processing, ME 310	3 Credit Hours



Kinematics, ME 321	3 Credit Hours
Machine Design, ME 322	3 Credit Hours
Heat Transfer, ME 340	3 Credit Hours
Junior Mechanical Lab, ME 351, 352	2 Credit Hours
Senior Mechanical Lab, ME 401, 402	2 Credit Hours
Senior Project, ENGR 450	2 Credit Hours
ENGR Graphics II, ME 112	3 Credit Hours
ME Systems	3 Credit Hours
135 Credit Hours	

The ME Systems course is to be chosen from the following:

Physical Metallurgy, ME 311  
 Production and Inventory Systems, IE 406  
 Instrumentation and Automatic Controls, ME 410  
 Heating and Air Conditioning, ME 420  
 Mechanical Energy Conversion, ME 430  
 Manufacturing Engineering, ME 440  
 Fluid Dynamics, ME 460  
 Mechanical Vibrations, ME 470  
 Advanced Machine Design, ME 480  
 Internal Combustion Engines, ME 490

The Humanities Electives may be chosen from two of the following fields:

Philosophy  
 Music  
 Art  
 Drama

SENIOR YEAR	Credit Hours	
	Fall	Spring
HUM. ELECT.; SPCH. 220	2	3
ECON. 211; ENGR 440	3	2
ENG 211, 212	3	3
ENG 310E; ENGR 430	3	3
*ME SYS; ENGR 450	3	2
TECH ELECT	3**	3**
ENGR 400	1	
ME 401, 402	1	1
	19	17

\*To be chosen from ME 311, ME 410, ME 420, ME 430, ME 440, ME 460, ME 470, ME 480, ME 490

\*\*Must be 300-400 level.

### COURSE DESCRIPTIONS

**ME 112. Engineering Graphics II. (3)** Representation of screw threads, fasteners, springs, auxiliary and sectional views, cams and gears and functional drafting. Working drawings of machine parts and basic descriptive geometry. Prerequisite: ENGR 111. Six laboratory hours per week.

**ME 302. Thermodynamics II. (3)** Study of gas mixtures involving ideal gases, the Gibbs Dalton Law; properties of moist air, the psychrometric chart; gas power and refrigeration cycles, thermodynamic relations, equations of state chemical reactions, the thermodynamics of combustion; availability and irreversibility. Prerequisite: ENGR 301.

**ME 310. Materials Processing. (3)** Application of equilibrium diagnosis to the physical and mechanical properties of materials and their heat treatment. Casting, deformation processes. Gaseous and arc welding and welding principles. Metal removing machining processes. Prerequisites: ENGR 230, CE 211.

**ME 311. Physical Metallurgy. (3)** Introductory theories of alloying. Review of equilibrium diagrams. Elementary kinetics of rate processes. Diffusion in solids. Nucleation and growth processes. Solidification. Heat treatments of alloys to produce equilibrium and non-equilibrium phases. Properties of alloys in relation to their structures. Plastic deformation, recovery and recrystallization. Corrosion and oxidation of metals and alloys. Prerequisite: ENGR 230.

**ME 412. Mechanical Metallurgy. (3)** Introduction to various measures of strength. Mechanical testing of polycrystalline materials. Plastic deformation of metal single crystals. Elementary geometry of dislocations. Dislocation mechanisms is the strengthening of metals through plastic deformation, solid solution and second phase dispersion and precipitation. Creep, fatigue and fracture of metals. Environmental effects. Prerequisites: Engr 230, ME 311.

**ME 413. Analytical Techniques. (3)** Study of various analytical and instrumental methods for the characterization of solid materials. This includes (1) Light Microscopy; (2) X-ray diffraction; (3) Transmission electron diffraction; and (4) Various surface characterization methods. Prerequisites: ENGR 230, ME 311.

**ME 321. Kinematics. (3)** Analysis of mechanisms. A study of instantaneous centers, velocities, accelerations and forces in plane

mechanisms of analytical and graphical methods. A study of rolling sliding contact including belts, chains, cams and tooth gearing in plane and epicyclic train. Prerequisites: MATH 164, ME 112, ENGR 212.

**ME 322. Machine Design. (3)** The design of machine parts, including shafting, gears, brakes, clutches, bearings, (sliding and anti-friction), springs, flywheels and frames, Prerequisites: ME 321, CE 211.

**ME 340. Heat Transfer. (3)** Introduction of heat transfer mechanisms; conduction heat transfer including steady state one, two and three dimensional conduction and conduction in the unsteady state; convection heat transfer including forced and free convection; radiation heat transfer; heat exchangers. Prerequisite: ENGR 301.

**ME 344. Heat Transfer. (3)** Heat transfer through conduction and radiation with experimental labs. Three 3-hour labs related to heat transfer and thermodynamics. Prerequisites: ENGR 301, MATH 282. (Formerly UTN course Mechanical Engineering 3440).

**ME 351-352. Junior Mechanical Laboratory. (1-1)** A comprehensive range of laboratory experiments. The student is taught how to measure physical thermal and mechanical properties and is introduced to a wide variety of instrumentation. Electromechanical instrumentation and the transfer function concept of calibration is emphasized. The short form of an engineering report is taught. Elementary experiments in mechanics of machines. Prerequisite: Junior Standing.

**ME 360. Mechanical Design. (3)** Application of stress analysis to mechanical design Prerequisite: ENGR 331. (Formerly UTN course Mechanical Engineering 3600).

**ME 361. Mechanics of Machinery. (3)** Machine motions, graphical and analytical methods; instantaneous centers; velocities; accelerations; Newton's Laws; work, energy, impact. Prerequisites: GRAPHICS 151, ENGR 214. (Formerly UTN courses Mechanical Engineering 3610-20)

**ME 362. Mechanics of Machinery. (3)** Single degree vibrating systems, multiple degree vibrating systems; static and dynamic forces; balancing; vibration isolation. Prerequisite: ME 361. (Formerly UTN course Mechanical Engineering 3630).

**ME 401-402. Senior Mechanical Laboratory. (1-1)** Experiments in the following areas: balancing of machines, vibrations and noise, internal combustion engines, heat transfer, air conditioning and control systems. Prerequisite: ME 352.

**ME 410. Instrumentation and Automatic Control. (3)** Dynamic response of instruments and measurement systems. Transducers. The influence of a measuring system on the process to be measured. Transfer function representation of machines or electromechanical elements. Transient and frequency response of control elements. Linear analysis of simple closed-loop systems. Criteria of stability and improvement of systems performance. Design of simple systems. Prerequisites: ENGR 303, EE 312.

### CURRICULUM FOR MAJOR IN MECHANICAL ENGINEERING:

FRESHMAN YEAR	Credit Hours	
	Fall	Spring
MATH 163, 164	4	4
CHEM 121; HIST 201	3	3
CHEM 121L; ENGR 100	1	1
ENGR 111; ME 112	3	3
ENG 101, 102	3	3
PE or ROTC	1	1
	15	15
SOPHOMORE YEAR	Credit Hours	
	Fall	Spring
MATH 341; ENGR 303	3	3
PHY 221, 222	4	4
ENGR 211, 212	3	3
ENGR 220, 230	3	3
ENGR 200; CE 211	3	3
PE or ROTC	1	1
	17	17
JUNIOR YEAR	Credit Hours	
	Fall	Spring
ENGR 301, ME 310	3	3
ME 321, 302	3	3
CE 310; ME 322	3	3
HIST 202, ME 340	3	3
ME 351, 352	1	1
CE 312		3
EE 312; HUM. ELECT	4	2
	17	18



**ME 420. Heating and Air Conditioning.** (3) Principles of heating, ventilating and air conditioning, systems in current use. Refrigeration cycles, refrigerant properties, heating, cooling loads, psychrometry; processes for heating, cooling, humidifying, dehumidifying, purifying; heat transfer principles; controls. Heat loss and gain computations. Design and layout of heating and air-conditioning systems. Prerequisite: ME 302, Co-requisite: ME 340.

**ME 430. Mechanical Energy Conversion.** (3) Energy sources; solar, chemical, hydraulic and nuclear. Discussion of solar cells, fossil fuels, hydraulic turbines, fuel-cells, thermionic generators, thermoelectric generators, MHD generators, fission reactors and the steam power plant. Prerequisite: ME 302.

**ME 440. Manufacturing Engineering.** (3) A quantitative study of the manufacturing processes of metal forming, metal-cutting and non-traditional machine operations combining the theory of material science with the synthesis of mechanical design. Lab experiments and demonstrations in material behavior characteristics, metal forming operations and topics related to metal cutting e.g., machinability, cutting forces, surface finish, metrology, numerical control and process capabilities. Prerequisites: Senior Standing, ME 310, CE 312.

**ME 442. Heat Transfer.** (3) Heat transfer by free and forced convection, heat transfer in phase change, heat transfer in high speed flow, heat exchanger applications. Prerequisite: ME 340. (Formerly UTN course Mechanical Engineering 4420).

**ME 445. Lubrication.** (3) Hydrodynamic theory of lubrication of sliding bearings, application of Navier-Stokes equations to infinity and finite bearings; analytical and numerical solutions; applications to design and three short experimental labs. Prerequisite: ENGR 311. (Formerly UTN course Mechanical Engineering 4450).

**ME 460. Fluid Dynamics.** (3) Review of the foundations of fluid dynamics and thermodynamics as related to control volumes; introduction to compressible flow; one-dimensional isentropic flow; normal shock waves; flow in constant area ducts with friction and flow in ducts with heating and cooling. Prerequisites: CE 310, ME 302.

**ME 467. Machine Elements and Design.** (3) Cam, gearing, brakes, clutches, bearings, lubrication; design of machinery; selection of materials, strength considerations. Prerequisites: ENGR 331, ME 362. (Formerly UTN courses Mechanical Engineering 4670-80).

**ME 468. Machine Design.** (3) Design of a complete machine. Prerequisites: ME 361-2, ME 467. (Formerly UTN course Mechanical Engineering 4680).

**ME 470. Mechanical Vibrations.** (3) Undamped and damped vibrations with one and two degrees of freedom. Methods of solution for n-degree of freedom systems. Transient vibration in one degree of freedom systems. Balancing and shirling of shafts. Noise and noise control. Prerequisites: ENGR 303, ENGR 212.

**ME 471. Thermal Environmental Systems.** (3) Refrigeration cycles, psychometric processes; refrigeration and air conditioning systems. Prerequisites: ME 302, 340. (Formerly UTN courses Mechanical Engineering 4710-20).

**ME 472. Thermal Environmental Systems.** (3) Equipment ratings test procedures; design of refrigeration and air conditioning systems. Prerequisite: ME 471. (Formerly UTN course Mechanical Engineering 4730).

**ME 480. Advanced Machine Design.** (3) The proportioning of machine elements by the application of mechanics and the principles of strength of materials modified by practical considerations, together with an elementary study of friction and lubrication. Use of computer for kinematic analysis and stress analysis. Design exercises. Prerequisite: ME 322.

**ME 490. Internal Combustion Engines.** (3) Fundamental principles of engine design and application including cycle analysis, gas analysis, effect of operation and engine design on air pollution, etc. Prerequisite: ME 302.

## BACHELOR OF SCIENCE IN ENGINEERING PROGRAM

**Mohan Malkani, Ph.D.,  
Acting Associate  
Dean (Coordinator)**

The Bachelor of Science in Engineering program is designed to offer adult students a maximum flexibility in course work selection which may suit their specific needs to enable the student to deal with a broad range of engineering problems. Students must declare nine (9) semester hours in one area of engineering elective and may take more courses in that area or may choose to spread their course work over many fields. This choice is left to the students to make, within the selection of courses which are offered. Areas of electives include Civil Engineering, Computer Science, Electrical Engineering, Industrial Engineering, Mechanical Engineering and Safety Engineering.

The Bachelor of Science in Engineering requires approximately three years of common course work of all students. Electives comprise the other year. There are 9 hours of technical electives, 11 hours of design electives, and 7 hours of non-technical electives. In order to assure an appropriate breadth in each engineering student's academic program, no more than 12 of 18 hours of engineering electives may be taken in the same discipline. The student is prepared to provide a wide variety of engineering services and may pursue one or more engineering areas further through the selection of electives.

Students seeking information about specialized engineering degrees should refer to the specific department in the School of Engineering and Technology.

### DEGREE REQUIREMENTS

Core Requirements for all students	106 credit hours
Technical Electives	9
Design Electives	11
Human Social Electives	3
Health	4
Total credit hours required	133 credit hours

### CURRICULUM FOR THE BACHELOR OF SCIENCE IN ENGINEERING

FRESHMAN YEAR	Credit Hours	
	Fall	Spring
MATH 163, 164	4	4
ENG 101-02	3	3
CHEM 221-222	4	4
ENGR 114, 115	2	2
ENGR 101, 213	2	3
HEALTH, ENGR 213L	2	1
	17	17

SOPHOMORE YEAR	Credit Hours	
	Fall	Spring
MATH 341, 342	3	3
ENG 211 or 212	3	
CS 220		3
PHY 221, 222	3	3
ENGR 214, 215	3	2
EE 200, 201	3	3
ENGR 214L, 215L	1	1
HEALTH		2
	16	17

JUNIOR YEAR	Credit hours	
	Fall	Spring
HIST 201, 202	3	3
TECH ELECT		3
ENGR 314	2	
ENGR 315		2
ENGR 331, CE 341	3	3
ENGR 345		3
ENGR 301	3	
HUM SOC ELECT	3	
EE 381, ME 344	3	3
	17	17

SENIOR YEAR	Credit hours	
	Fall	Spring
TECH ELECT	3	3
ENGR 430; IE 322	3	3
ENGR 415, ENGR 423	3	2
DES ELECT	3	6
ENGR 414		2
ENGR 404	4	
	16	16

### COURSE DESCRIPTIONS COMPUTER SCIENCE

**CS 110. Computers and Society.** (2) History of computing systems; capabilities of a computer; applications in the humanities, social science, science and engineering; future advances in computing; impact of computers on modern life. (Formerly UTN course Computer Science 2130).



**CS 121. Introduction to Computing. (2)** Algorithms, programs and computers. Organization and characteristics of computers. Survey of computers, languages, systems and applications. Emphasis on design solutions to problems. Prerequisite: High School algebra. (Formerly UTN course Computer Science 2140).

**CS 220. Computer Programming—FORTRAN. (3)** Fortran or another high-level language used for solving problems in science and engineering. Prerequisites: MATH 163; BE 141; CS 121; or permission of instructor. (Formerly UTN course Computer Science 3150).

**CS 221. Computer Programming—COBOL. (3)** Cobol or other data processing language. Prerequisite: CS 121 or permission of instructor. (Formerly UTN course Computer Science 3410).

**CS 222. Computer Programming—NOBOL. (3)** Snobol or high-level language of interest to students in the Humanities. Prerequisite: CS 121 or permission of instructor. No previous UTN course.

**CS 225. Advanced COBOL. (3)** Application of COBOL to business problems. Topics include file processing, sorting, subroutines and structured programming. Prerequisite: CS 221. (Formerly UTN course Computer Science 3910).

**CS 230. Discrete Mathematical Structures. (3)** Sets, relations, Boolean algebra, propositional logic, functions and computability; graph theory and its applications to computer science; set theoretical characterizations of computing machines and computing languages. Prerequisites: CS 121, Math 163. (Formerly UTN course Computer Science 3715).

**CS 240. Computer Organization I. (3)** Assembly language programming including addressing methods, representation of information, instruction executing and I/O programming. Prerequisite: CS 220. (Formerly UTN course Computer Science 3550).

**CS 245. Computer Organization II. (3)** Basic computer architecture. Organization and structure of major computer components, both hardware and software. Prerequisite: CS 240. (Formerly UTN course Computer Science 3560).

**CS 250. Data Structure. (3)** Data structures and algorithms for their manipulation. Arrays and lists, stacks, queues, rings, doubly-linked lists, trees, dynamic storage allocation; organization of files. Prerequisite: CS 230. (Formerly UTN course Computer Science 4510).

**CS 305. Programming Languages. (3)** Comparison and analysis of programming languages, their characteristics and implementation. Languages to be discussed will include ADA, ALGOL, LISP, APL, PASCAL, PL/1, and PL/2 subsets. Prerequisite: CS 250. (No previous UTN course).

**CS 340. Logic Design. (3)** Switching algebra, logic design of combinational circuits, minimization methods; sequential circuit analysis and synthesis. Prerequisite: CS 230. (Formerly UTN course Computer Science 4650 and Electrical Engineering 4620).

**CS 345. Analog Computers. (3)** Analog computing; problem set-up and scaling; multipliers, function generators; operational amplifiers; stabilization; and accuracy. Prerequisite: CS 220, knowledge of differential equations. (Formerly UTN course Computer Science 4640 and Electrical Engineering 4610).

**CS 370. Data Management Systems. (3)** Data organization and storage techniques. Designing systems by organizing files and segmenting problems into programs to make efficient use of hardware devices. Documentation methods and techniques for modifying systems. Communication problems among individuals involved in system development. Prerequisites: CS 225, CS 250. (Formerly UTN course Computer Science 4910).

**CS 380. Introduction to Operations Research. (3)** Introduction to various methods of system optimization. Simplex method; search techniques, gradient methods; dynamic programming, integer programming, and geometric programming. Applications from management science, engineering, economics and physical sciences. Prerequisites: CS 220, ENGR 345, MATH 163. (Formerly UTN course Computer Science 3510).

**CS 385. System Stimulation. (3)** Discrete simulation models, queueing theory, and stochastic processes. Comparison of simulation languages. Simulation methods including Monte Carlo techniques. Prerequisites: CS 220, ENGR 345, MATH 163. (Formerly UTN course Computer Science 3520).

**CS 390. Numerical Analysis. (3)** Interpolation and approximation, numerical differentiation and integration, roots of equations. Prerequisites: CS 220, Math 341, Math 462. (Formerly UTN course Computer Science 4225).

**CS 410. Operating Systems. (3)** Hardware interrupt systems and concurrence of I/O operations. Multiprogramming systems, memory management, protection, resources allocation and control, job management and task management; real time systems, time sharing systems; paging; virtual memory, schedulers, reliability, file management services and system accounting. Prerequisite: CS 245. (Formerly UTN course Computer Science 4610).

**CS 420. Compiler Construction. (3)** Review of program language structure, translation, loading, executing and storage allocation. Compilation of simple expressions and statements. Organization of a compiler including compile-time and run-time symbol tables, lexical scan, syntax scan, object code generation, error diagnostics, object code optimization and overall design. Prerequisite: CS 250. No equivalent UTN course.

**CS 440. Artificial Intelligence. (3)** Topics in machine intelligence. Prerequisite: CS 250. No equivalent UTN course.

**CS 450. Computer Graphics. (3)** Prerequisite: CS 250. No equivalent UTN course.

**CS 460. Microprocessors. (3)** Programming and use of microprocessors. Topics covered include: number systems, microprocessing hardware, memory, addressing, instructions, peripheral interfacing and programming prob-

lems. Prerequisite: CS 220. (Formerly UTN course Computer Science 4110).

**CS 480. Computer Science. (3)** No equivalent UTN course.

**CS 490. Special Topics. (3)** May be repeated for up to 6 hours credit. Individual topics as approved by the program chairman. (Formerly UTN course Computer Science 4920-30).

## INDUSTRIAL ENGINEERING

**IE 322. Work Methods and Design. (3)** Job analysis, job evaluation, design of wage structures, design of work-place layouts, flow charting, activity chart and analysis, and methods improvement. Laboratory work included. (Formerly UTN course Industrial Engineering 3220).

**IE 344. Quality Control. (3)** Application of statistical methods to the control of quality of manufactured parts and techniques of inspection. Laboratory work included. Prerequisite: Statistics 345. (Formerly UTN course Industrial Engineering 3440).

**IE 351. Industrial Operations Research I. (3)** Linear Programming including simplex, transportation, and assignment models. Introduction to dynamic programming and network analysis. Prerequisites: ENGR 345, CS 220. (Formerly UTN course Industrial Engineering 3520).

**IE 352. Industrial Operations Research II. (3)** Introduction of quantitative analysis of industrial systems, including model formation, queueing theory, inventory analysis and simulation techniques. An introduction to random processes and the use of probabilistic methods in replacement and industrial analysis. Prerequisite: IE 351. (Formerly UTN course Industrial Engineering 3510).

**IE 406. Production and Inventory Systems. (3)** Fundamentals and applications of statistical forecasting for production planning, inventory analysis and control techniques. Production planning procedures, economic start quantity analysis and production scheduling and control models. The overall production process as in integrated systems. Prerequisites: IE 351 and IE 352. (Formerly UTN course Industrial Engineering 4160).

**IE 416. Materials Handling and Facilities Planning. (3)** Analysis and planning for the overall problem of moving, packing, and storing of materials; equipment comparison and selection, cost analysis; facilities planning including plant layout, materials handling and service area design. Prerequisites: IE 452. (Formerly UTN course Industrial Engineering 4160).

**IE 423. Scheduling Systems. (3)** Performance measures for job and flow shop scheduling, including both static and dynamic conditions, as well as techniques for generation production schedules. Deterministic and probabilistic dispatching conditions. Prerequisite: ENGR 345. (Formerly UTN course Industrial Engineering 4230).

**IE 424. Predetermined Time Systems. (3)** Work design and measurement using a predetermined time system, such as MTM; with applications to learning curves; standard data



methods and incentive systems. Prerequisite: I.E. 322. (Formerly UTN courses Industrial Engineering 4240, 4250).

**IE 425. Work Measurement Application.** (3) Application of learning curves, queuing theory, standard data methods, and incentive systems to the design of industrial work situations. Prerequisite: IE 322. (Formerly UTN course Industrial Engineering 4250).

**IE 454. Industrial Development.** (3) Factors other than mechanical or chemical which enter into the successful establishment of manufacturing enterprise. Cost and location studies and market analysis to determine the commercial feasibility of new plants of projects. (Formerly UTN course Industrial Engineering 4540).

**IE 459. Simulation.** (3) Generation of outcome of a complex random process by computer. Models of complex systems using available simulation languages, simulation as a design tool in industrial systems. Prerequisite: Computer Science 220. (Formerly UTN course Industrial Engineering 4590).

**IE 481. Human Factors in Work Design.** (3) Human capabilities and limitations affecting work place layouts, working environment, design of tools and equipment and communications and response to man-machine systems. Prerequisite: IE 322. (Formerly UTN course Industrial Engineering 4810).

## SAFETY ENGINEERING CERTIFICATE

**Y. Y. Clark,  
P.E., Coordinator**

The area of Safety Engineering has expanded considerably in the last decade, greatly increasing the need for trained, experienced professionals. Where can either the engineering student, or the graduate already in industry learn the methods and procedures required of the Safety Professional? Tennessee State University has recognized the need for formal, professional training in this area, and has developed the Safety Engineering Certificate Program to produce qualified Safety practitioners for industry and government.

Upon completion of the required curriculum, the Safety Engineering Certificate recipient should be able to organize and develop a company safety program, will be knowledgeable of OSHA requirements, will be able to measure and control noise problems, will have performed industrial hygiene analyses of toxic materials and vapors, and will have had professional training in Industrial Fire Hazards.

The Safety Engineering Certificate curriculum may also be used as an area of concentration in the Industrial Engineering Program.

## SAFETY ENGINEERING CERTIFICATE

### Required Courses

Safety Engineering 331—Industrial Safety (3)

Safety Engineering 410—Industrial Occupational Safety and Health I (3)

Safety Engineering 412—Industrial Occupational Safety and Health II (3)

Safety Engineering 413—Noise (3)

Safety Engineering 416—Industrial Hygiene (3)

Safety Engineering 421—Hazardous Materials (3)

Industrial Engineering 481—Human Factors in Work Design (3)

Fire Science 232—Industrial Fire Hazards (3)

### SAFETY ENGINEERING COURSE DESCRIPTIONS

**SE 331. Industrial Safety.** (3) Accident prevention and control, with emphasis on industrial safety programs and development of safety organization.

**SE 410. Industrial Occupational Safety and Health I.** (3) The Occupational Safety and Health Act of 1970; historical development, standards; reporting, recording and logging, inspection procedures and penalties; standards on buildings; protective equipment; materials handling and storage; machinery; and hazardous materials.

**SE 412. Industrial Occupational Safety and Health II.** (3) Safety requirements related to compressed gas and air equipment; hand and portable power equipment; welding, cutting, brazing; electrical systems; special industries; safety training and education; illumination; hoists and elevators; cranes and derricks; signs, signals and barricades; traffic control; blasting; concrete forms and shoring; demolition; walking and working surfaces; floor and wall openings; stairs and runways; fire prevention and control; housekeeping; personal protective equipment; ladders and scaffolds; flammable liquids and excavation and trenching.

**SE 413. Noise.** (3) Characteristics of noise; generation, transmission and suppression; measurement; functions of the ear in receiving and processing sound; adverse effects of noise environment; measurement of hearing loss; federal and state regulations pertaining to noise.

**SE 416. Industrial Hygiene.** (3) A study of the effects of occupational health hazards on workers in industry; emphasizing the recognition of toxic agents which may cause these adverse effects, the evaluation of the magnitude of occupational stresses, the control of exposure to those agents by utilization of appropriate engineering and management controls. A strong emphasis is on standard utilization

of Industrial Hygiene monitoring of control equipment so that class members may acquire practical experience to prepare them for actual industrial requirements.

**SE 421. Hazardous Materials.** (3) Chemical characteristics relative to storage, handling, and transporting hazardous materials including oxidizing and combustible solids, flammable liquids, and radioactive compounds. Appropriate emergency actions, fire fighting and control.

## DEPARTMENT OF INDUSTRIAL ARTS AND TECHNOLOGY

**Cecil M. Ryan, M.S.,  
Acting Head**

The Department of Industrial Arts and Technology is designed to offer instruction for the purpose of preparing and upgrading teachers of industrial subjects, safety and driver education and technological middle management positions for industry, government and other agencies. The department offers a program leading to the Bachelor of Science degree with options in the following areas: Technical Aeronautics, Industrial Arts Education, Industrial Technology and Transportation Services and Technology. The department also offers a program leading to the Associate of Science degree in Fire Science. Students must have at least a 2.0 average in all lower division courses before enrolling in upper division area courses. The student is expected to complete a minimum of 135 semester hours of course work to earn the Bachelor of Science degree.

Courses are offered in Driver and Safety Education, technical and industrial education leading to teacher certification.

### CURRICULUM FOR THE INDUSTRIAL TECHNOLOGY MAJOR

**Thomas Brooks,  
Coordinator**

Industrial Technology is a field of study which draws upon the principles of management, science, and the technology of industry. These principles are applied to the development of ideas and the solution of products and services, and to the management and supervision of the personnel involved.

The curriculum in Industrial Technology is designed to prepare personnel for positions in industry which require technical competency, managerial ability, and a broad liberal background. More specifically, the curriculum leads to a Bachelor of



Science in Industrial Technology with a concentration in one of the following technology areas: Construction, Electronics and Printing.

The construction option is designed to meet the needs of students who wish to acquire principles of small commercial building construction which will enable them to obtain positions as construction supervisors, materials salesmen, contractors, and building inspectors. The electronics option is designed to prepare individuals for positions as electronics engineering aides, industrial electronics technicians and communication technologists. Students pursuing the Printing option may secure positions as plant managers, foremen, supervisors and salesmen within the printing industry.

The courses required for in Industrial Arts and Technology. Options are listed below:

CONSTRUCTION CONCENTRATION

IAT 111	Woodworking Tech.	3
IAT 102	Residential Const. Methd and Materials	3
IAT 212	Masonry Const.	3
IAT 231	Electricity	3
IAT 321	Const. Drawing I	3
IAT 322	Const. Drawing II	3
IAT 330	Concrete Tech.	3
IAT 412	Estimating	3
IAT 421	Modern Building Tech.	3
IAT 304	Elect. Wiring I	3
IAT 305	Elect. Wiring II	3
		33

PRINTING CONCENTRATION

IAT 141	Introduction to Printing	3
IAT 142	Relief Presswork	3
IAT 201	Linotype Operation	3
AT 202	Makeup and Imposition	3
AT 301	Offset Fundamentals	3
AT 302	Cost Finding, Estimating and Bindery Operation	3
AT 401	Production	3
AT 402	Production	3
		30

ELECTRICAL CONCENTRATION

AT 231	Electricity	3
AT 323	Basic Electricity	3
AT 304	Elect. Wiring I	3
AT 305	Elect. Wiring II	3
AT 331	Electronics Comm. I	3
AT 332	Electronics Comm II	3
AT 434	Industrial Wiring	3
AT 102	Resid. Const. Mt.	3
AT 321	Const. Drawing I	3
AT 322	Const. Drawing II	3
AT 412	Estimating	3
		33

SUGGESTED ELECTIVES

IAT 314	Industrial Production Management	3
AE 312	Working Drawings	3
IAT 331	Electronics Communication I	3
AE 441	Building Equipment	3
IAT 413	Foremanship Training by Conference Method	3
IAT 432	Industrial Wiring	3
DSED 400	Driver Education Traffic Safety	3
DSED 412	Advance Problems in Driver and Traffic Safety	3
		24

CURRICULUM IN INDUSTRIAL TECHNOLOGY OPTION

FRESHMAN YEAR	Credit Hours	
	Fall	Spring
ENG 101, 102	3	3
MATH 111, 112	4	3
IAT 101, 102	3	3
MAJ TECH OPT	3	3
IAT 141	2	
IAT 103		3
PE or AERO	1	1
		16

SOPHOMORE YEAR	Credit Hours	
	Fall	Spring
SCI 121, 122	3	3
HIST 201, 202	3	3
Technology Option Elect 3-3	3	3
ENG 211, 212	3	3
IAT 231; IAT 121	3	3
MG 101	3	
PE or AERO	1	1
		19

JUNIOR YEAR	Credit Hours	
	Fall	Spring
IAT 311, IAT 331	3	3
*IAT 343; HUM. Elect	3	2
Tech. Option Elect	3	3
IAT 330-AC211	3	3
*IAT 304-BL 323	3	3
		15

SENIOR YEAR	Credit Hours	
	Fall	Spring
SOC. SC. Elect	3	
*IAT 414, 412	3	3
*IAT 450; PHIL 314	2	2
ENGR 400, HUM. Elect	1	2
Tech Option Elect	3	3
EC. 211; IAT 316	3	3
		15

Summer--IAT 374 Industrial Internship (9)  
Total Semester Hours Required: 134

CURRICULUM FOR THE TECHNICAL AERONAUTICS OPTION

Cecil M. Ryan,  
Coordinator

The Technical Aeronautics Curriculum is an academically oriented program of study directed toward training for gainful

occupations in general aviation, aerospace industries, airplane manufacturing corporations, or private aeronautical service enterprises. The wide background provided through this curriculum enables a graduate to qualify for positions as support personnel working directly with engineers on a technical level. (Because of a policy of allowing academic credit for graduates of approved armed services schools or those holding current F.A.A. licenses in specified areas, this program should be especially attractive for those active or ex-service personnel who meet college entrance requirements and who desire to further their training toward a B.S. degree.)

CURRICULUM IN TECHNICAL AERONAUTICS

FRESHMAN YEAR	Credit Hours	
	Fall	Spring
ENG 101, 102	3	3
IAT 101, 102	3	3
IAT 131, 132	3	3
IAT 134, 135	3	3
MATH 111, 112	4	3
PE or AERO	1	1
		17

SOPHOMORE YEAR	Credit Hours	
	Fall	Spring
ENG 211, 212	3	3
IAT 221, 311	3	3
SCI 121, 122	3	3
HIST 201, 202	3	3
HUM Elect., IAT 141	2	2
ART 133; IAT 370	2	3
PE 20's thru 50's or AS	1	1
		17

JUNIOR YEAR	Credit Hours	
	Fall	Spring
IAT 314, 342	3	3
IAT 371, 372	3	3
IAT 381, 382	3	3
IAT 324		3
CS 193, IAT 343	3	3
IBE 323	3	
IAT 373, BF 335	3	3
		18

SENIOR YEAR	Credit Hours	
	Fall	Spring
IAT 441, 442	3	3
IAT 451-473	3	3
IAT 450; SOC SCI	2	3
Electives (300-400)	3	3
IAT 370	3	
ENGR 400, IAT 414	1	3
		15

Total Semester Hours Required: 134  
Total Semester Hours Required for a Minor: 18  
Consisting of IAT 135, 370, 371, 381, 382, 451

INDUSTRIAL ARTS EDUCATION OPTION

William S. Merriman, Jr., Ph.D.,  
Coordinator

The Industrial Arts Curriculum is organized to offer experiences that will prepare young men and women as teachers of In-



dustrial Arts in junior and senior high schools, and to provide experiences of all students who wish to develop an appreciation for and an understanding of the technological society in which they live.

Students in Industrial Arts Education must meet all requirements of the University with regards to its Teacher Education Program. Such requirements are listed under the School of Education as "General Information on the Teacher Education Program."

Requirements for Certification in Industrial Arts Education

The student must complete a core of major courses selected from the areas listed below:

- AREA I  
Drafting—6 semester hours  
IAT 101—Graphic Communication I (3)  
IAT 102—Graphic Communication II (3)
- AREA II  
Electricity—Electronics—6 semester hours  
IAT 231—Electricity (3)  
IAT 232—Basic Electronics I (3)
- AREA III  
Graphic Arts—6 semester hours  
IAT 151—Introduction to Printing (3)  
IAT 142—Relief Presswork (3)
- AREA IV  
Manufacturing and Construction Industries—15 semester hrs.  
(Woods) IAT 111—Woodworking Technology (3)  
IA 312—Machine Woodworking (3)  
(Crafts) IAT 353—General Crafts (3)  
(Metals) IAT 121—General Metals (3)  
IAT 324—Machine Tools Technology (3)
- AREA V  
Power and Transportation 6 semester hours  
IAT 361, 62—Power Technology (3,3)

In addition to the above 39 semester hours of general industrial arts requirements, 6 hours of Industrial Arts Education electives are also required. These electives should be used to secure single subject endorsements in various areas in industrial arts. Single subject endorsements may be obtained in any one of the following areas by completion of the hours indicated below: (Note: courses in the five major areas of major courses may be included in the single subject endorsement)

- Drafting 9 semester hours
- Electricity—Electronics 9 semester hours
- Graphic Arts 6 semester hours
- Metals 9 semester hours
- Woods 6 semester hours

- Plastics 3 semester hours
- Crafts, Art Appreciation 5 semester hours
- Power Mechanics 9 semester hours
- Ceramics 6 semester hours

CURRICULUM FOR THE INDUSTRIAL ARTS EDUCATION OPTION

FRESHMAN YEAR	Credit Hours	
	Fall	Spring
ENG 101, 102 .....	3	3
MATH 111, 112 .....	4	3
IAT 101, 102 .....	3	3
*IAT 111, 121 .....	3	3
*IAT 141, 151 .....	2	3
HUM. Elect.....		2
PE or AERO .....	1	1
	16	18
SOPHOMORE YEAR	Credit Hours	
	Fall	Spring
ENG 211, 212 .....	3	3
HIST 201, 202 .....	3	3
SCI 121, 122 .....	3	3
EDCI 201; Psy 242 .....	3	3
IAT 231, .....	3	
PE or AERO .....	1	1
HEA 151, IAT 142 .....	2	3
	18	16
JUNIOR YEAR	Credit Hours	
	Fall	Spring
EDCI 301; PSY 312 .....	3	3
IAT 232, 312 .....	3	3
IAT 361, 362 .....	3	3
IAT 316, 413 .....	3	3
IAT 353; IAT 314 .....	3	3
HUM. Elect; EDSE 465; .....	2	3
	17	18
SENIOR YEAR	Credit Hours	
	Fall	Spring
EDCI; IAT 344 .....	3	3
IAT 343; IAT 472 .....	3	9
IAT 450;EDRD 491 .....	2	3
ENG 400 .....	1	
IAT 311 .....	3	
SOC SCI ELECT .....	3	
IAT 414 .....	3	
	18	15
Total Semester Hours Required: 136		

CURRICULUM FOR THE TRANSPORTATION SERVICES AND TECHNOLOGY OPTION  
Theodore Ledwith,  
Coordinator

The Transportation Services and Technology Curriculum offers education designed for the rapidly growing transportation industry. It is envisioned as an interdisciplinary program designed to prepare students for positions in the areas of Transportation, Travel, and Tourism. Upon successful completion of the curriculum, the student possesses the following competencies:

- (1) Have a broad overview of transportation and the various industries that are allied with it.
- (2) Be able to understand and cope with the problems of a large complex organization designed to serve the needs of individuals and groups of travellers as well as the handling of freight and cargo from aircraft, railroads, trucks, pipelines; seaports, and barges and inland waterways.
- (3) Be familiar with problems relative to leisure travel and tourism.
- (4) Be able to perform supervisory, administrative and technical tasks relative to the organization, management and personnel for Transportation, Travel and Tourism.
- (5) Be technically competent to entrance levels in the transportation services.

Courses required for a option in Transportation Services and Technology are listed below:

IAT 141	Orientation	2
IAT 314	Industrial and Production Management	2
IAT 210	Fundamentals of TST	3
IAT 306	Transportation Rates and Economics	3
IAT 307	Transportation Managing and Marketing	3
IAT 317	Physical Distribution and Transportation Management	3
IAT 318	Transportation Terminal Management	3
IAT 377	Internship TST	6
IAT 415	Tourism Development	3
IAT 416	Problems in Transportation	3
TST	Electives	6
Total		38

PROGRAM FOR CERTIFICATION IN DRIVER EDUCATION

Students may meet certification requirements in Driver Education by completing the following courses:

DSED 400—Driver Education and Traffic Safety	3
DSED 410—Teaching Methods in Driver and Traffic Safety Ed	3
DSED 412—Advanced Problems in Driver and Traffic Safety Ed	3
DSED 420—General Safety Education	3
HED 302—First Aid	2
Total	14

CURRICULUM FOR TRANSPORTATION SERVICES AND TECHNOLOGY

FRESHMAN	Credit Hours	
	Fall	Spring
ENG 101, 102 .....	3	3
MATH 111, 112 .....	4	3
SCI 121, 122 .....	3	3
IAT 141, 102 .....	2	3
PE or AERO .....	1	1
IAT 101; CS 193 .....	3	3
	16	16



SOPHOMORE YEAR	Credit Hours	
	Fall	Spring
ENG 211, 212 .....	3	3
AC 211; GEO 271 .....	3	3
IAT 210; EC 211 .....	3	3
HUM. Elect. ....	2	2
IAT 231 .....		3
PE or AERO .....	1	1
HIST 201-02 .....	3	3
	15	18

JUNIOR YEAR	Credit Hours	
	Fall	Spring
IAT 306, 307 .....	3	3
IAT 317, 318 .....	3	3
IAT 311, 314 .....	3	3
IAT 343 .....	3	
IAT 370 .....		3
BL 323; ENG 310 .....	3	3
	15	15

SENIOR YEAR	Credit Hours	
	Fall	Spring
IAT 306, 307 .....	3	3
IAT 317, 318 .....	3	3
IAT 450 .....	2	
IAT 311, 314 .....	3	3
IAT 343, 370 .....	3	3
ENGR 400, IAT		
Electives 300-400 .....	1	
	15	15

IAT 377 Internship in TST (9 hr. cr.) must be taken the summer following completion of Junior Year.

Total Semester Hours Required: 134

Total Semester Hours Required for a Minor: 18

### PROGRAM FOR CERTIFICATION IN INDUSTRIAL EDUCATION

Students may meet certification requirements in Industrial Education by successfully completing the following courses:

IAT 316—Foundation of Industrial Education	3
IAT 343—Shop Organization and Management	3
IAT 344—Materials and Methods for Teachers of Shops and Related Subjects	3
IAT 375—Methods of Teaching Education	3
IAT 413—Foremanship Training by the Conference Method	3
IAT 414—Job Analysis	3
IAT 431—Curriculum Planning in Industrial Education	3
IAT 435—Problems in Trade and Industrial Teaching	3
IAT 436—Problems in Trade and Industrial Teaching	3
Total	27

### Associate of Science Degree in Fire Science

Cecil M. Ryan, Coordinator

The Association of Science in Fire Science is a recently developed program that recognizes a growing national trend to-

ward enhanced professionalism and changing qualifications in fire science. This Associate Degree is the first stage of a possible career ladder sequence which also includes the opportunity to pursue a Bachelor's Degree, with minimal loss of credits earned in the Associate Degree program. Course work covers communication and management skills, as well as 45 hours in technical courses. Eighteen (18) hours of electives allow the student flexibility to prepare for future educational objectives. Courses are scheduled and delivered to permit those persons presently employed with fire departments to participate with little conflict to their variable work schedules. Students who wish to pursue a Baccalaureate Degree can do so in Business Administration or Engineering.

### CURRICULUM FOR THE PROGRAM IN FIRE SCIENCE

#### FIRST YEAR

##### First Semester

ENG 101 .....	3
MATH 111 .....	4
SOC 211 .....	3
FS. 210 .....	3
A.E. 270 .....	3
	16

##### Second Semester

ENG 102 .....	3
PSY 201 .....	3
CHEM 121 .....	4
FS. 211 .....	3
FS. 212 .....	3
SPCH 230 .....	3
	19

#### SECOND YEAR

##### First Semester

PHY 211 .....	4
S.E. 421 .....	3
FS. 220 .....	3
FS. 231 .....	3
FS. 240 .....	3
FS. 242 .....	3
	19

##### Second Semester

FS. 243 .....	3
FS. 221 .....	3
FS. 232 .....	3
FS. 244 .....	3
FS. 260 .....	3
FS. 261 .....	3
	18

### COURSE DESCRIPTIONS INDUSTRIAL ARTS AND TECHNOLOGY (IAT)

**IAT 101. Graphic Communication I. (1-4-3)** Instruction in the use of drafting tools, lettering, sketching, geometrical construction, multi-view projection, auxiliary views and revolutions, sectioning and dimensioning as applied to industrial graphic. One hour lecture and four hours laboratory.

**IAT 102. Graphic Communication II. (1-4-3)** A study of pictorial drawings, thread design and working drawing, intersection experience in

drafting practices and theory. One hour lecture and four hours laboratory.

**IAT 103. Residential Construction Methods and Materials. (1-4-3)** Tools and materials of frame construction. Laying out and sketching of a building. Construction methods. One hour lecture and four hours of laboratory. (Formerly IAT 102)

**IAT 111. Woodworking Technology. (3) (1-4-3)** An introduction to the tools materials, processes and personnel used in the woodworking industry. One hour lecture and four hours laboratory.

**IAT 121. General Metalworking. (3) (1-4-3)** An introduction to the tools, materials, processes, and personnel of the metalworking industry. One hour lecture and four hours laboratory.

**IAT 131. Aerospace Basic Science. (3-0-3)** This course includes a basic study of the physical properties of air, elements of aerodynamics, airfoil design and reactions in accordance with Newton's laws and Bernoulli's principles, as applied to bodies in motion. Also blueprint reading standards, materials and hardware. Aircraft structural design and structural frame requirements for fuselage and wing components including wing loading and stress analysis. Three hours lecture. (Formerly ARO 101)

**IAT 132. Power Plants I. (1-4-3)** Energy conversion principles and practices. Thermodynamic working fluids and pressure/torque conversion processes. Fourstroke cycle and two strike cycle engine principles and design, carburetion and induction systems design and requirements. Battery and Ignition system design, precombustion activities and the combustion process, cooling and lubrication systems. One hour lecture and four hours laboratory. (Formerly ARO 102)

**IAT 134. Model Building. (3-0-3)** Deals with nomenclature, structure, design, and the building of various aircraft models. Three hours lecture. (Formerly ARO 111)

**IAT 135. Aircraft Familiarization. (3-0-3)** A survey course designed to acquaint the student with the basic areas of concentration within the field of aviation. Three hours lecture. (Formerly ARO 112)

**IAT 141. Orientation. (2-0-2)** Acquaints the student with the departmental requirements, makes him aware of our present-day industrial and technological demand, with some of the implications for the future, and his role in our modern society. (Formerly IED 101)

**IAT 142. Relief Presswork. (1-4-3)** Skills are developed in the care and maintenance, registration, making-ready, and feeding of hand-fed platen and automatic cylinder presses. Prerequisite: IAT 141. One hour lecture and four hours laboratory.

**IAT 151. Introduction to Printing. (1-4-3)** An introduction to the tools, materials, processes, and personnel of the Printing Industry. One hour lecture and four hours laboratory.

**IAT 201. Linotype Operation. (1-4-3)** The development of manipulative skills on the linotype keyboard and the performance of first



and second echelon maintenance. One hour lecture and four hours laboratory.

**IAT 202. Make-up and Imposition. (1-4-3)** Emphasis on the development of skills in the make-up and imposition of books, newspapers, pamphlets, brochures, and broadsides, and reproduction proofs. One hour lecture and four hours laboratory.

**IAT 210. Fundamentals of Transportation, Travel and Tourism. (3-0-3)** An introductory study of the various modes of transportation and their relationships to travel and leisure activities. Study of the growth, use, progress and need for rapid transit systems. (Formerly TST 201)

**IAT 212. Masonry Construction. (1-4-3)** Tools and materials, block construction, brick veneer construction, curtain wall, screen walls, different types of mortar, adhesive for masonry walls, fireplace construction and design. One hour lecture and four hours laboratory.

**IAT 221. Airframe Structures I. (1-4-3)** Basic hydraulic and pneumatic systems. Compressibility and thermal expansion of fluids. Fluidity and viscosity effects. Viscosity index graphs. Transmission of pressure in liquids and demonstration of the principles of Pascal's law that makes possible the transmission of force through liquids, problems and solutions in mechanical advantages and losses. Basic hydraulic system design and essential unit functions, plumbing for aerospace systems, pressure of mechanical instruments, Gyro instruments. One hour lecture and four hours laboratory. (Formerly ARO 201)

**IAT 222. Power Plants II. (1-4-3)** Engine starting systems and essential units design and function. Performance and power calculation. Maintenance techniques and acceptable tune-up procedures. Output power torque measurement. Engine overhaul practices and procedures, disassembly cleaning, visual and micrometric procedures, inspection of engine parts, magnaflex inspection, and non-destructive testing. Engine control systems. Engine installation; test and final run-up and final inspection. Prerequisite: (IAT 131, 132)

**IAT 231. Electricity. (1-4-3)** An introduction to the tools, materials, processes, and personnel of the electronics industry with emphasis on basic circuits, magnetism, and electrical principles. One hour lecture and four hours laboratory.

**IAT 232. Basic Electronics. (1-4-3)** A study of basic electronics principles and acceptable practices in the utilization of electronics devices, generation, transmission, and use of electric power. One hour lecture and four hours in laboratory.

**IAT 301. Offset Fundamentals. (1-4-3)** Principles and practices of the offset processes are studied. Care, maintenance and operational skills of the offset presses are developed. Techniques of copy preparation, camera work stripping, opaquing, line and half-tone negatives and plate-making are developed. One hour lecture and four hours laboratory.

**IAT 302. Cost Finding, Estimating and Bindary Operation. (1-4-3)** Copy fitting and esti-

imating the cost of producing all types of printed matter. Standard sized, weights and proper uses of cover cards, book and bond papers are studied. The development of skills in the operation of the power cutter, folder, stitcher and perforator. One hour lecture and four hours laboratory.

**IAT 304. Electrical Wiring I. (2-4-3)** Practice in residential wiring, calculating and determining the size of service and circuits, methods and procedures in wiring. This course includes elementary lighting theory, fixture selection and maintenance, rules and regulations as prescribed by the current National Electrical Code. Prerequisite: IAT 231. Two hour lecture and four hours laboratory.

**IAT 305. Electrical Wiring II. (2-4-3)** A continuation of IAT 304 with the emphasis on commercial and industrial wiring. Prerequisite: IAT 304. Two hour lecture and four hours laboratory.

**IAT 306. Transportation Rates and Economics. (3-0-3)** A study of the basic economic factors involved in transportation; scope of transport economics, transport pricing, rates, laws, rules and regulatory agencies that govern transportation.

**IAT 307. Transportation Managing and Marketing. (3-0-3)** A study of the basic principles and existing practices used in managing and marketing transportation materials. (Formerly TST 302.)

**IAT 311. Industrial Safety. (3-0-3)** Development of the industrial safety movement; psychology in accident prevention; appraisal of accident cost factors, severity and frequency; job analysis and corrective measures; plant inspection and preventive maintenance; storage and handling of materials; fire prevention; education and training of employees.

**IAT 312. Machine Woodworking. (1-5-3)** Emphasis is placed upon the proper maintenance and operation of such power woodworking machines as circular saws, bandsaws, planers, jointers and lathes. Projects are constructed that involve the use of these machines. Prerequisite: IAT 111. One hour lecture and five hours laboratory.

**IAT 314. Industrial and Production Management. (3-0-3)** A general survey of the problems in organizing, planning and controlling the use of men, money, materials and machines for production and construction. This course also provides the theoretical foundations for production management as well as the applications of decision-making techniques to the production problems of industry.

**IAT 316. Foundation of Industrial Education. (3-0-3)** History and development of Industrial Education; social and economic reasons for present educational movements; types of modern industrial schools and courses; apprenticeship system and training of workers in modern industry. (Formerly TST 311)

**IAT 317. Physical Distribution and Transportation Management. (3-0-3)** A study of the management and organization of physical distribution transportation, warehousing, inventory control, material handling, industrial packaging, order processing, and location analysis. (Formerly TST 311)

**IAT 318. Transportation Terminal Management. (3-0-3)** Study methods used for receiving and shipping, filing systems, bill of lading and enroute documentation, special filing systems for receiving and instant rerouting of in-transit materials. General office equipment records, Communication systems, pick-up delivery, and storage space allocation, Employment and personnel problems. Labor unions, seniority rights and promotions. (Formerly TST 312)

**IAT 321. Construction Drawing I. (1-4-3)** Study of modern house and small commercial building construction methods, drawing details of carpentry and masonry construction. Modern materials, plots, Layout contour maps, preliminary sketches, architectural symbols. Prerequisite: IAT 102. One hour lecture and four hours laboratory.

**IAT 322. Construction Drawing II. (1-4-3)** Basic house design, site consideration, modular aspects, drawing a complete set of plans. Two points perspective; designing small commercial buildings, steel framing drawings, concrete structural drawings. Prerequisite: IAT 321. One hour lecture and four hours laboratory.

**IAT 323. Sheetmetal Working. (1-4-3)** Introduction to sheetmetal working, developing pattern, laying-out cutting, bending, framing, forming, making seams, wiring edges, turning a burr, crimping, riveting, spot welding, and soldering sheetmetal. Planning and making projects and developing subject matter as taught on the junior and senior high levels. One hour lecture and four hours laboratory.

**IAT 324. Machine and Tool Technology. (1-4-3)** A study of the various methods of changing the shape of metals with machine tools. Instruction will consist of basic manufacturing processes and techniques with emphasis on the engine lathe, drill press, milling machine, shaper, and grinder. One hour lecture and four hours laboratory. (Formerly IAT 321)

**IAT 325. Personal Travel Planning. (3-0-3)** Evaluation of existing systems used in daily commuter travel; study of scheduling problems, vehicle required speed, safety factors and cost analysis. Customer complaints, terminal and transfer travel, airplane and automobile rental services. Physical and legal practices and requirements for leisure and group travel. (Formerly TST 321)

**IAT 326. Articulation, Communication and Sales. (3-0-3)** Study of various modes and methods used in transportation and commuter travel operations, to determine the physical probability and economic feasibility of combining all operations to improve articulation of materials and commuter travel from one system to another, Finding solutions to the inherent problems of communications and selling these services to the public. Three lecture periods each week. Prerequisite: IAT 101. (Formerly TST 322)

**IAT 330. Concrete Technology. (1-4-3)** Designs of footing and foundations, forming and handling concrete, reinforced concrete construction, insulating and water proofing, etc. One hour lecture and four hours laboratory.

**IAT 331. Electronics Communication I. (1-4-3)** This course deals with testing, repair,



service and construction of AC devices, radio receivers and other electronic equipment used in communication. One hour lecture and 4 hours laboratory.

**IAT 332. Electronics Communication II. (1-4-3)** A continuation of IAT 331 with emphasis on the testing, repair, service and construction of A.C. devices, radio receivers and other electronic equipment used in communication. Pre-requisite: IAT 331. One hour lecture and four hours laboratory.

**IAT 341. Airframe Structures II. (1-4-3)** Methods and materials of fabrication of aerospace structures, use of MIL and AN standards: FAA technical standard order (TSO), type certificates (TC), supplemental type certificates (STC). Classification of repairs, and alterations. Reports, forms, drawings and recordation requirements. Repair station requirements and practices. Prerequisite: IAT 221. One hour lecture and four hours laboratory. (Formerly ARO 301).

**IAT 342. Thrust Conversion. (1-4-3)** A study of fundamental engineering designs and stress analysis of aircraft propellers. Design principles and operational characteristics of fixed-pitch, variable-pitch, and constant-speed propellers. Propeller governors and r.p.m. control devices; also fuels and lubricants for aircraft and aerospace vehicles. Prerequisite: IAT 222. One hour lecture and four hours laboratory. (Formerly ARO 302)

**IAT 343. Shop Organization and Management. (3-0-3)** Securing equipment, making inventories and arranging for proper storage of materials, supplies and tools. Typical shop layouts, arrangements for tool rooms, stock rooms and storage facilities; keeping records and accounts. Personnel management of students and the organization of students' participation in shop management and safety. (Formerly IED 331)

**IAT 344. Materials and Methods For Shops and Related Subjects For Teachers. (3-3)** Detailed study, combined with actual operation of each of the several standard types of projects; lesson planning for teaching specific units involving audiovisual aids; maintenance, and repair of projection equipment. The design and construction of static and dynamic models, selected for use in specific teaching units. (Formerly IED 332)

**IAT 352. Plastics Technology. (1-4-3)** A study of the kinds and uses of plastics and an application of the fundamental principles and techniques of design and construction of plastic projects as used on the secondary school level. One hour lecture and four hours laboratory.

**IAT 353. General Craft. (1-4-3)** An introduction to the tools, materials, processes, and personnel of the general crafts industry. Instruction consists of creative craft activities and work in wood, metal, leather, and other suitable materials. One hour lecture and four hours laboratory.

**IAT 361. Power Technology. (1-4-3)** A study of methods of generating, transmitting, controlling and applying power and energy; and the function of power systems in our present-day society. One hour lecture and four hours laboratory.

**IAT 362. Power Technology. (1-4-3)** Continuation of 361 with emphasis on the operation, design maintenance and repair of power engines and machines. One hour lecture and four hours laboratory.

**IAT 370. Meteorology. General effects of weather phenomena, special study of its relation to aviation. Three hours lecture (Formerly ARO 310)**

**IAT 371. Communications. (3-0-3)** The development of methods of communication, radio navigation, morse code, air traffic control, etc. Three hours lecture. (Formerly ARO 311)

**IAT 372. Federal Aviation Regulations. (3-0-3)** Federal, state and local safety regulations with their application to aviation. Three hours lecture. (Formerly ARO 312)

**IAT 373. Link Operations. (1-4-3)** The principles involved in the GAT-1 Simulator, its operation and maintenance. One hour lecture and four hours laboratory. (Formerly ARO 371)

**IAT 374. Industrial Internship. (9)** A summer cooperative venture between the university and industrial enterprises which provides actual on-the-job experiences for industrial technology majors in the Department. All majors are required to take Industrial Internship at the end of their sophomore and junior years. The Head of the Department of Ind. Arts & Tech. must approve all internships before students are permitted to enroll. Internship may be conducted in a commercial establishment or at Tennessee State University. Efforts will be made to arrange with contracting agencies who cooperate in the Industrial Internship program to assist the financing subsistence needs of students. However, a student enrolled in Industrial Technology should arrange to finance himself during his internship. Forty laboratory hours each week. (Formerly IED 374)

**IAT 375. Methods of Teaching Industrial Education. (3-0-3)** Lesson planning, techniques of the demonstration, plans for related instruction, and methods of testing studied. Prerequisite: Admittance to the Teacher Education Program. (Formerly IED 371)

**IAT 377. Internship in TST. (9) (Summer I & II)** Actual experience from on the job training in Transportation and Travel Systems. (Formerly TST 374)

**IAT 381. Theory of Flight and Engines. (3-0-3)** The laws of aerodynamics and nature as applied to aviation; also the principles, familiarization and operation of the internal combustion and jet engines. Three hours lecture. (Formerly ARO 321)

**IAT 382. Navigation. (3-0-3)** The principles involved in scientifically going from one place to another by means of air travel. Practical experience is offered in this course. Three hours lecture. (Formerly ARO 322)

**ENGR 400. Senior Seminar. (1-0-1)** (See course descriptions for senior seminar)

**IAT 401-492. Production. (0-6-3), (0-6-3)** These courses are designed to round out the student's training by concentrated application of principles and techniques gained in previous courses. Twelve hours laboratory.

**IAT 403. General Shop. (1-4-3)** A study of general concepts, purpose, organization and administration of the general shop. Instruction is offered in a variety of industrial arts activities. One hour lecture and four hours laboratory. (Formerly IAT 401)

**IAT 405. Leisure Travel. (3-0-3)** A study of factors related to the sociology and marketing of leisure travel. Exploration of existing parks and recreational facilities, local and national.

**IAT 406. Tourism Services. (3-0-3)** A study of services to tourist centers, hotel, motel, convention and trade show facilities, and other enterprises which might attract people. (Formerly TST 402)

**IAT 412. Estimating. (2-2-3)** Specification writing, materials take off. Labor and subcontractors. Calculating cost of materials and labor, for residential and commercial structure. Job planning, requisition of materials, building permits, codes and restrictions.

**IAT 413. Foremanship Training by the Conference Method. (3-0-3)** A study of the use of the conference as an instructional device; special methods, techniques, and procedures to be used in foreman training, duties and responsibilities of the typical industrial foreman. How to follow up foreman conferences by means of foreman's clubs and plant educational programs. (Formerly IED 411)

**IAT 414. Job Analysis. (3-0-3)** A study of the techniques of defining, identifying, classifying, organizing and expressing teachable elements of occupations for instructional purposes. Practice in analyzing trade jobs for production, auxiliary and related technical content. (Formerly IED 412)

**IAT 415. Tourism Development. (3-0-3)** A study of ways and techniques of promoting and developing the tourist industry; leisure industry facilities. (Formerly TST 411)

**IAT 416. Problems in Transportation. (3-0-3)** Problem study of selected areas in transportation, travel and tourism to meet the needs of students having a professional interest in the field. (Formerly TST 412)

**IAT 421. Modern Building Technology. (2-4-3)** Low cost housing modular construction, precast concrete, tilt up erection and assemble load, and strength of materials. How to read span tables, load tables, glued laminated wood beams. Steel framed houses. One hour lecture and four hours laboratory.

**IAT 423. Welding and Heat Treating. (1-4-3)** An introduction to arch, tig and acetylene welding. Fundamentals foundry practice and heat treatment of metals. One hour lecture and four hours laboratory.

**IAT 431. Curriculum Planning in Industrial Education. (3-0)** Arranging course materials in trade students; follow-up results of job analysis; preparing check sheets and individual job sheets in both trade and related subjects. Prerequisite: IAT 414. (Formerly IED 431)

**IAT 432. Industrial Wiring. (2-4-3)** A course to acquaint the students with electronic application in industry, electronics control of machine operation and product grading, counting,



inspection and other electronically operated electro-mechanical innovations are studied. Two hours lecture and four hours laboratory.

**IAT 435-436. Problems in Trade and Industrial Teaching. (3-0-3)** Individual or group work on assigned or chosen problems involving the preparation, use and evaluation of instructional materials for use in vocational industrial classes. Research involving the compilation and study of student records, employment placement, job progress, earnings, wage scale and similar items may also be carried out. Three hour lecture periods each week. (Formerly IED 435, 436)

**IAT 441. Aircraft Electrical Systems. (1-4-3)** This course covers the basic fundamentals of aircraft electricity and deals with the design principles and functional operation of aircraft and aerospace electrical accessories and appliances, and includes basic theories and simulated functional operation of direct current systems and 400 cycle A.C. systems as used in aerospace vehicles. Prerequisites: IAT 131, IAT 222. One hour lecture and four hours laboratory. (Formerly ARO 401)

**IAT 442. Avionics. (1-4-3)** This course covers the principles of electronics and electronics circuits elements as used in aircraft and aerospace vehicles for communication, navigation, and direction finding equipment. Prerequisite IAT 441. One hour lecture and four hours laboratory. (Formerly ARO 402)

**IAT 450. Senior Project. (0-4-2)** Each senior is required to select and execute a project under the supervision of his major advisor. It may involve the designing and making of the project complete with drawings, pictures, specification and detailed data involved in its construction; or a research and compilation of a subject within the field of the student's interest. Four hours laboratory (Formerly IED 450L)

**IAT 451. Flight Training I. (1-4-3)** How to fly with actual flight experience and instruction. Ten clock hours of dual flight instruction. One hour lecture and four hours laboratory. (Formerly ARO 411).

**IAT 452. Aeronautics Workshop. (3-0-3)** Designed primarily for in-service teachers whose objectives are to enrich their curriculum by weaving air age materials into their specific subject area. Development of classroom procedures. Three hours lecture. (Formerly ARO 412)

**IAT 472. Student Teaching. (9)** Provides an opportunity for each prospective industrial education teacher enrolled at this institution to engage in the actual observation and teaching of industrial education classes in the secondary schools in this state. Student teacher schedules should be arranged to enable the student to devote full time to student teaching. (Formerly IED 472).

**IAT 473. Flight Training II. (1-4-3)** Continuation of IAT 451. Ten dual hours.

## DRIVER SAFETY EDUCATION (DSED)

**DSED 400. Driver Education and Traffic Safety. (2-2-3)** Designed to teach the beginning driver to drive according to standards of

the American Automobile Association. Two hours lecture and two hours laboratory.

**DSED 410. Teaching Methods in Driver and Traffic Safety Education. (1-4-5)** Designed to prepare teachers, administrators, and supervisors of driver education. It involves practice in both classroom and behind-the-wheel phases of the program. Prerequisite: (Open only to licensed, experienced drivers approved by the instructor). One hour lecture and four hours laboratory.

**DSED 412. Advanced Problems in Driver and Traffic Safety Education. (3-0-3)** Presentation and consideration of safety and traffic education research, issues and teaching problems. Relationships within school, community and related agencies.

**DSED 420. General Safety Education. (3-0-3)** A study of the general program of safety education in public schools. Covers safety problems in school, recreation, industry, home, and other public areas.

## FIRE SCIENCE (FS)

**FS 210. Introduction to Fire Control. (3)** Identification and definition of the fire problem and what different organizations are doing to control it. A study of the history and philosophy of fire protection and prevention and discussion of different methods of educating the public in fire prevention. Each student will design and develop his own fire prevention program.

**FS 211. Principles of Fire Protection Chemistry. (3)** Relationships of fire to the physical world through chemistry and physics. Develops understanding of heat transfer and its effects on combustibles. Shows how modern extinguishing agents chemically extinguish fires. Must be taken before any other Fire Science courses. (Formerly UTN course Fire Science 2120).

**FS 212. Basic Hydraulics. (3)** Basic fluid mechanics. Preparation for more advanced courses in specialized hydraulics, such as extinguishing system design and fire ground hydraulics. Prerequisite: Math 111 or 150; Fire Science 211. (Formerly UTN course Fire Science 2120).

**FS 220. Inspection Practices and Procedures for Fire Safety. (3)** Proper inspection practices and procedures. Fixed and portable fire extinguishers; fire detection and alarm systems; application of building and fire codes to fire inspections. Each student will conduct his own fire inspection. (Formerly UTN course Fire Science 2200).

**FS 221. Fire Protection Evaluation. (3)** Evaluation of public fire defenses in municipality; organization, physical resources, etc. Actual evaluations will be done by students. Prerequisite: Fire Science 220. (Formerly UTN course Fire Science 2210).

**FS 231. Building Construction and Fire Codes. (3)** Building construction as related to fire protection, fire resistance ratings of construction of building materials. How to read codes and standards properly. Prerequisite: Civil Engineering 270. (Formerly UTN course Fire Science 2310).

**FS 232. Industrial Fire Hazards. (3)** Fire hazards associated with industrial operations and processes, minimization of industrial fire hazards, and an introduction to high property risk management. Prerequisite: Fire Science 211. (Formerly UTN course Fire Science 2320).

**FS 240. Fire Fighting Hydraulics. (3)** Advanced level hydraulics in the fire fighting field. Prerequisite: all of core program. Corequisite: Fire Science 271. (Formerly UTN course Fire Science 2400).

**FS 242. Municipal Fire Administration. (3)** Systems approach to planning public fire safety. Fire Department organization, administration and operation. (Formerly UTN course Fire Science 2420).

**FS 243. Fire Fighting Strategy and Tactics. (3)** Methods and procedures of size-up and condition determination. Aspects of company operations and performance levels. Prefire planning, assigning duties and fire ground operations. Prerequisite: Fire Science 242. (Formerly UTN courses Fire Science 2410 and 2430).

**FS 244. Legal Aspects of Fire Science. (3)** Legal rights and responsibilities of firemen, liabilities of firemen, mutual aid and assistance of fire departments, jurisdictional domain, organizational procedure. Prerequisite: All fire science courses. (Formerly UTN course Fire Science 2440).

**FS 250. Fire Resistance Test Methods and Procedures. (3)** In depth study of fire resistance testing as done by nationally recognized testing laboratories such as the American Society of Testing Materials and Underwriter's Laboratories. Applying the results of these tests to do designing proper fire protection systems. Prerequisite: All fire science courses. (Formerly Fire Science 2500).

**FS 251. Structural Fire Protection Design. (3)** Designing structural systems to meet fire code requirements. Protecting structural members and proper building techniques to insure hourly rated structural systems against fire. Prerequisite: All Fire Science core program, Graphics 110, Fire Science 250. (Formerly UTN course Fire Science 2510).

**FS 252. Sprinkler and Standpipe Design. (3)** Designing sprinkler and standpipe systems. Selection of systems to fit building needs and adjusting present systems to meet needed changes. Prerequisite: All of Fire Science core program, Graphics 110, Fire Science 251. (Formerly UTN course Fire Science 2520).

**FS 260. Fire Protection and Prevention Design Project. (3)** Integration of concepts, ideas and fundamentals of fire protection and prevention involving research, analysis, and the development of fire protection and prevention projects. Prerequisite: Permission of Fire Science advisor. Student will work in groups. (Formerly UTN course Fire Science 2600).

**FS 261. Fire Science Research. (3)** Each prospective graduate is required to select and execute a project involving Fire Science Research under the supervision of the major advisor.



# THE SCHOOL OF NURSING

Marion F Gooding, Ph.D., R.N., Dean

The newly established School of Nursing was designed to prepare students from varied backgrounds to develop competencies at the technical level in the associate degree curriculum and to develop competencies at the professional level in the baccalaureate degree curriculum. The Continuing Education in Nursing Program, provides opportunities for enlarging the scope of nursing knowledge. In keeping with the mission and goals of Tennessee State University, the School of Nursing aims to provide an atmosphere conducive to quality education, promote the goals of higher education, meet the needs of the culturally diverse student, and to provide competent nursing practitioners to meet the health care needs of society.

## ASSOCIATE DEGREE NURSING CURRICULUM

### Purpose and Objectives

This program is designed to prepare students from varied backgrounds to develop technical and intellectual competencies necessary for entry into practice at the technical level.

Upon completion of the program, the graduate of the Associate of Science Degree Program will be able to:

1. Utilize principles and concepts from the physical biological and social sources to make critical judgments in nursing situations.
2. Apply problem solving techniques in setting priorities and meeting nursing care needs.
3. Apply communicative skills in the exchange of information related to the patients' welfare.
4. Utilize the holistic approach in assisting individuals in identifying and meeting their health needs.
5. Assist in providing continuity of care for health conservation, maintenance and rehabilitation.
6. Recognize the ethical and legal responsibilities inherent in the role of the registered nurse.

### Admission Requirements

The specific requirements for admission to the Associate of Science Degree Nursing Program are as follows:

1. File an application in the Admissions Office before April 1 of the admitting year. Students seeking readmission to the University must follow the established procedure and adhere to the above deadline.
2. The high school transcript and official college transcript of credit (if any earned) must be submitted to the Office of Admissions and Records. All applicants must have completed the following:
  - a. One unit of high school chemistry or its equivalent with a grade of C or better.
  - b. Two units of high school mathematics with a grade of C or better.
  - c. Achievement of a cumulative grade point average of not less than 2.25 from high school or with minimum of 30 semester hours in college.
3. Those students who meet the high school pre-requisites and demonstrate potential for full-time college work will be scheduled for a pre-nursing examination. Scores at the 40th percentile and above are acceptable.
4. The final selection will be made from all information compiled.

Students are admitted to nursing once a year in the Fall Semester. The number of students admitted each year is dependent on the size of the faculty, the availability of clinical facilities, and specific learning techniques to be utilized in the curriculum.

### ADMISSION WITH ADVANCED STANDING IN THE ASSOCIATE DEGREE CURRICULUM

1. The applicant must have attended an NLN accredited college nursing program.
2. The applicant must meet the admission requirements for the TSU AD Nursing program.

3. The applicant must have successfully completed all pre-requisites and corequisites for the nursing course being considered for transfer credit.
4. The applicant must have achieved a grade of C or above level in all the nursing course(s) being considered for transfer credit.
5. The nursing course(s) being considered for transfer credit must be comparable with the respective TSU nursing course(s).
6. Transfer credit may be given for Nursing 101 (6 credits), Nursing 102 (7 credits), and Nursing 120 (4 credits). The maximal limit for advanced standing is 17 nursing credits (Nursing 101, Nursing 102, and Nursing 120).
7. Applicants who have attended a non-accredited college nursing program have the option of taking proficiency exams for Nursing 101, 102, and/or 120.

## REQUIREMENTS FOR ASSOCIATE DEGREE PROGRAM

Students seeking the Associate-in-Science Degree in Nursing must complete the curriculum as outlined below. Upon successful completion of the required program, the university awards an Associate of Science degree, and the graduate is eligible to take the State board Test Pool Examination for licensure (R.N.).

### CURRICULUM IN ASSOCIATE DEGREE NURSING

FRESHMAN YEAR Courses	Credit Hours	
	Fall	Spring
Zoology 201, 202 .....	4	4
English 101, 102 .....	3	3
Psy 201, 310 .....	3	3
Mathematics 110 .....	1	
Nursing 101, 102 .....	6	7
	17	17

Summer Session (10 weeks)		Credits
Nursing 120 .....		4
Psychology 351 .....		3
		7

SOPHOMORE YEAR Courses	Credit Hours	
	Fall	Spring
Microbiology 250 .....	4	
Sociology 211 .....	3	
Nursing 201, 202 .....	9	9
Seminar 220 .....		1
Elective .....		6
	16	16

## BACCALAUREATE DEGREE NURSING PROGRAM

### PURPOSE AND OBJECTIVE

The program has been designed to prepare a generalist in nursing for entry into practice at the professional level.



Upon completion of the Bachelor of Science Degree Program in Nursing, the graduate will be able to:

1. Utilize theoretical and empirical knowledge from the natural, behavioral and nursing sciences and the humanities as a basis for making nursing practice decisions.
2. Utilize nursing practice as a means of gathering data for refining nursing care.
3. Assess the health status and potential of health care consumers.
4. Evaluate current nursing and health care practices and initiate alternative approaches to those practices when appropriate.
5. Accept individual responsibility and accountability for nursing actions and their outcomes.
6. Use research process and findings in nursing practice.
7. Organize and coordinate nursing care for health care consumers.
8. Collaborate with multidisciplinary health team members to improve health care delivery.
9. Assess the social and health related needs of the community and participate actively in effecting change.
10. Demonstrate a positive attitude toward continuing education and/or graduate education in order to maintain professional competency.

**ADMISSION REQUIREMENTS**

There are three steps involved in the procedure for admission to the BS Nursing Program. First, the applicant must be admitted to Tennessee State University. Upon admission to the University, the student is admitted to the lower division of the baccalaureate program.

When the student has completed the lower division requirements with a 2.5 cumulative average a petition for admission to the upper division nursing courses must be made to the Departmental Admissions Committee. The students will be notified in writing of their eligibility to begin upper division nursing within 30 days after the petition is received. The number of students admitted each year will be dependent on the program resources.

**ADMISSION REQUIREMENTS FOR REGISTERED NURSES**

Registered nurses and/or graduates of diploma and associate degree nursing programs must also adhere to the above procedures. The policies regarding transfer credit and credit by examination are published in the School of Nursing brochure. After permission has been granted to take upper division nursing courses, R.N. graduates may petition to challenge up to 20 credits in the junior level nursing courses. All baccalaureate

nursing students must complete 25 hours in nursing courses at the University. Transfer baccalaureate nursing students from traditional and nontraditional nursing programs may **not** transfer nursing courses. However, they may petition to challenge junior year clinical nursing courses, i.e. N301, N302, and N303.

**REQUIREMENTS FOR THE BACHELORS DEGREE**

All Tennessee State University graduates must meet the requirements for the Bachelor of Science degree as presented in the catalogue. The curriculum as outlined below includes the University and the Nursing requirements.

FRESHMAN YEAR		
Courses		
	Credit	Hours
	Fall	Spring
Eng 101, 102 .....	3	3
Psy 201, 310 .....	3	3
Zoo 201, 202 .....	4	4
Math 111 .....	4	
Chemistry 121 or 131 .....		4
*Physical Ed.....	1	1
	15	15

Summer Sessions		Credits
Psychology 351 .....		3
Economics 221 or 132.....		3
Chemistry 132 .....		4
		10

SOPHOMORE YEAR		
Courses		
	Credit	Hours
	Fall	Spring
Soc 211 .....	3	
MCB 250 .....	4	
Hist 201, 202 .....	3	3
English 211, 212 .....	3	3
Chemistry 250 .....		3
Philosophy 201 .....		3
*Physical Ed.....	1	1
	14	13

Summer Session		Credits
Elective.....		3
Psychology 311 .....		3
Philosophy 250.....		3
		9

JUNIOR YEAR		
Courses		
	Credit	Hours
	Fall	Spring
Nurs 301, 302.....	6	8
Nurs 322 .....	3	
Zoo 470, 471 .....	4	4
Soc 360 .....		3
	13	15

Summer Session		Credits
Nurs 303 .....		6
Elective.....		3
		9

SENIOR YEAR		
Courses		
	Credit	Hours
	Fall	Spring
Nurs 401, 402.....	8	8
Elec (recommended).....	3	
Nurs 422, 423.....	3	3
Nurs 425 .....		3
	14	14

\*Physical Education Requirements for Students under 25 years of age.

**ACADEMIC POLICIES FOR CONTINUATION IN THE BACCALAUREATE AND ASSOCIATE DEGREE NURSING PROGRAMS**

A student is required to achieve at the C level or better in nursing courses. Students who receive a grade less than a C in nursing courses cannot progress until they have satisfactorily completed that course in which they received less than a grade of C. Students who receive a grade of D or below twice in the same nursing course or in any two nursing courses will be dropped from the nursing program whether or not any of these courses have been repeated for higher grades. Continuation in the program is contingent upon compliance with ethical and professional standards of conduct as well as academic honesty. Students whose cumulative G.P.A. falls below 2.0 will be unable to continue in the nursing sequence until they achieve a 2.0 cumulative average.

**POLICIES REGARDING READMISSION TO THE BACCALAUREATE AND ASSOCIATE DEGREE NURSING PROGRAMS**

1. Students must have cumulative G.P.A. of at least 2.0 to apply for readmission. Request for readmission will be evaluated under the rules and guidelines for admission after attending other accredited colleges or universities must submit official transcripts of all course work.
2. All students requesting readmission must submit a new written request to the Program Director no later than (16) weeks prior to registration for the regular course offerings. Written requests and applications for readmission should be sent to the Program Director.
3. All applications for readmission will be reviewed by the Nursing Admissions Committee.
4. The Committee will review past achievement and qualifications for admission based on admission criteria for most recent academic year. Recommendations will be made by the Committee to the Program Director who will then communicate with the student.



## GRADUATION REQUIREMENT

Besides the graduation requirements established by Tennessee State University, all nursing candidates are reviewed by a school committee to determine if each candidate has met all objectives of the respective program. (See School of Nursing Student Handbook for details).

## CONTINUING EDUCATION IN NURSING PROGRAM

Programs of continuing education are planned to meet needs of nurses in the community who wish to upgrade and/or update their knowledge and skills.

The objectives for the continuing education program are:

1. Plan activities that are consistent with the philosophy and objectives of the parent institution and the Division of Nursing.
2. Plan activities that are compatible with quality educational criteria.
3. Plan activities that meet the expressed criteria of Southern Association of Schools and Colleges, Standard IX and professional nursing organizations.
4. Devise continuing education programs for interdisciplinary professional groups regarding health issues of mutual interests and concerns.
5. Cooperatively plan educational activities with consumers to meet their expressed needs.
6. Plan programs that will contribute to the individual nurse's re-entry into practice.
7. Plan programs that encompass varied teaching methodologies eg. lecture, discussion, laboratory, group sessions, panels, etc.
8. Plan programs that will expand the professional nurse's practice and knowledge for improved nursing care.
9. Plan programs to increase the competencies of the professional nurse in her new and expanded roles.

## ASSOCIATE IN SCIENCE DEGREE NURSING COURSE DESCRIPTIONS

**Nursing 101: Fundamentals of Nursing. (6 hours)** Introduction to the concept of man, environment and health needs throughout the life cycle. Basic skills related to maintenance of normal functioning is emphasized. Pre or co-requisite, Zoology 201, Math 110.

**Nursing 102: Nursing Care in Commonly Occurring Health Problems in Adult and Child I. (7 hours)** Assessment, planning, and intervention in care of patients with conditions related to cardiopulmonary, peripheral vascu-

lar, respiratory and renal malfunctioning. Includes growth and development, nutrition, psycho-social and cultural aspects. Pharmacology integrated. Pre or co-requisite, Zoology 202, Psychology 201. Math 110 pre-requisite.

**Nursing 120: Nursing Care in Commonly Occurring Health Problems in Adult and Child II. (4 hours)** Assessment, planning and intervention in care of patients with conditions related to reproductive-hormonal, musculoskeletal, digestive and sensory deprivation health problems. Includes growth and development, nutrition, psycho-social and cultural aspects. Pharmacology integrated. Pre or co-requisite, Psychology 351, Psychology 310.

**Nursing 201. Family-Centered Approach with Long-Term Illness. (9)** Through application of the nursing process, the student learns to assist the individual with long-term illness, and his family, to cope with commonly occurring changes in health status which require a variety of skills, psychological support, prevention and rehabilitation, and health teaching. Includes Psychiatric Nursing. Pre or co-requisite Sociology 211.

**Nursing 202. Family-Centered Approach to Acute and Short-Term Illness.** Utilizing the nursing process, the students learn to assume increasing responsibility for self-directive judgments in patient situations which require depth of understanding of concepts and principles related to man and his adaption to the environment during crisis. (Includes Obstetrical Nursing) 9 credits. Pre or co-requisite, Microbiology 250.

**Nursing 220: Nursing Seminar (1 credit)** Current issues and trends in the practice of nursing and the relationships with past events. This course includes legal aspects, nursing ethics, and those aspects of professional adjustments related to making the transition from student to graduate practitioner. Co-requisite with Nursing 202 or 201.

**Nursing 200: Special Topics. (1-4 hours)** Students or faculty generated course. Scope of subject matter to be determined by students/instructor with approval of the Program Director.

## BACCALAUREATE DEGREE NURSING COURSE OFFERING

**Chemistry 250. Introduction to Pharmacology.** Chemical analysis of drugs according to classification. Focused on physiological effects on bio-psychosocial functions of man. 3 credits.

**Nurs. 300. Special Topics. (1-8)** Student of faculty generated course. Scope of subject matter to be determined by student/instructor with approval the Program Director.

**Nurs. 301. Concepts Basic to Nursing** An introduction to selected concepts of health as it relates to man's biopsychosocial and cultural needs throughout the life cycle. Includes the nursing process as utilized in health assessment in health assessment. 6 Semester hours. Lecture 3 credits; Laboratory 3 credits. ment with beginning skills in health history, physical examination and basic nursing techniques. Emphasis will be given to history,

trends, legal-ethical and communication components of nursing practice.

**Nurs. 302. Family Nursing I** Focuses on the application of the nursing process in the delivery of care to expanding families and children. Emphasis on developmental theory as it involves coping effectively with maturational and situational stress through young adult. Incorporates concept of mental health and community nursing. Prerequisite nursing 301.

**Nurs. 303. Family Nursing II** Focuses on the application of the nursing process in the delivery of care to clients and families with commonly occurring medicals, surgical and psychiatric health problems. Emphasis on environmental factors and the application of developmental systems and stress theories as it relates to the health care system. Physical assessment techniques with middle age and older adults. Prerequisite Nursing 301.

**Nurs. 322. Scientific Writing (3)** The study of and practical experience in the steps in planning for and preparation of scientific writing. Library search exploring possibilities for publication, illustrative features, copyright law, and process of revision.

**Nurs. 401. Community Health Nursing** Utilization of nursing process in care of families in changing situations. Emphasis in-depth study of comprehensive family care and community assessment. Specific experience in developmental, stress and system theories is provided through family case analysis. Emphasis upon physical assessment techniques in the home. Prerequisite Nsg. 301, 302 and 303.

**Nurs. 402. Acute Crisis Nursing** Synthesis of the nursing process in a variety of clinical situations requiring crisis intervention. Experiences include comprehensive health assessment, and evaluating care for the client and his family in the hospital and or community. Prerequisite Nursing 301, 302, and 303.

**Nurs. 422. Nursing Research I** Nursing Research I—Introduction to the Research Process. Procedures for research. Application to research in nursing.

**Nurs. 423. Nursing Research II: Senior Project** Critiques of published research. Grant proposals. Sponsored research. Report of practical problems in collection, analysis, and interpretation of data. Active participation in a nursing project under guidance of a faculty sponsor.

**Nurs. 425 Professionalism in Nursing** Professionalism in Nursing 425. Identification and application of management processes as they relate to the merging roles and changing roles of the professional nurse, issues and trends in practice, and professional legal and ethical implications. For BSN students only.

**Nurs. 426. Nursing 426 (Nursing Elective)** Nursing 426. Legal and Ethical Issues in Nursing. The student will have the opportunity to analyze critically and discuss both classical and current legal and ethical cases in nursing service and education.

**Nurs. 427. Nursing Elective** Nursing in Developmental Disabilities. Nursing elect Nursing assessment and intervention with the develop-



mentally delayed child and his family from conception through adolescence. (3 credits) 1.5 credit hour lecture 1.5 credit—clinical laboratory. Prerequisites Nursing 301, 302, and 303.

**Nurs. 428. Nursing Elective** Gerontological Nursing. In-depth application of nursing process in maturational and situational crisis experienced by the older adult. Emphasis will be regarding the psychosocial factors influencing health, institutional and community—based alternatives to health care. Prerequisites—Nursing 301, 302 and 303. Semester credit hours 3 (1.5 semester credit lecture 1.5 semester credit laboratory).

AEROSPACE STUDIES

Charles E. Guthrie, Lieutenant Colonel USAF, Professor of Areospace Studies

PURPOSE AND OBJECTIVES

The Air Force Reserve Officers Training Corps (AFROTC) provides precommission training for college men and women who desire to serve as commissioned officers in the United States Air Force. When combined with the academic disciplines offered at the college level, the program provides the student a broad based knowledge of management, leadership, and technical skills required for commission and subsequent active duty service in the Air Force. Graduates are commissioned as Second Lieutenants and called to active duty within one year. The duration of obligated active service is four years for those in a non-flying category, five years for navigator training and six years for Pilot training. Provisions are available for educational delays for non-flying graduates who desire to pursue advanced degrees prior to entry on active duty. The main objectives of producing officers through the AFROTC program are:

- 1. To procure officers with a broad educational base.
- 2. To provide a basic military education for college students.
- 3. To teach fundamentals and techniques of leadership, management, and decision-making.
- 4. To develop, in conjunction with other academic disciplines, individual character and attributes required of a commissioned officer in the United States Air Force.

AFROTC CROSS-TOWN ENROLLMENT

Full-time students enrolled at any one of the colleges or universities listed below are eligible to participate in the AFROTC program hosted by Tennessee State University:

- Vanderbilt University
- Middle Tennessee State University
- Fisk University
- David-Lipscomb College
- Trevecca Nazarene College
- Belmont College
- Meharry medical College
- Volunteer State Community College
- Aquinas Junior College

Students who participate in AFROTC under provisions of cross-town agreements receive all benefits, privileges, and compete for scholarships on the same basis as full-time students enrolled at Tennessee State University.

UNIVERSITY CREDITS AND CURRICULUM

A minor in Aerospace Studies consists of 22 semester hours and is available to those students who successfully complete the General Military Course (GMC) and the Professional Officers Course (POC).

FRESHMAN—(GMC)	
AERO 151.....	1
AERO 152.....	1
	2
SOPHOMORE—(GMC)	
AERO 251.....	1
AERO 252.....	1
	2
JUNIOR—(POC)	
AERO 351.....	3
AERO 352.....	3
Elective*.....	3
	9
SENIOR —(POC)	
AERO 451.....	3
AERO 452.....	3
Elective*.....	3
	9

\*Courses may be taken at any time during the Junior or Senior year and must be selected from 300 and 400 level Social Science offerings.

The General Military Course (GMC) is composed of the first four semesters of Aerospace Studies. All of the Basic requisite courses are acceptable in lieu of activity courses in Physical Education. (Two courses in Aerospace Studies will be accepted for two activity courses in Physical Education).

COURSES DESCRIPTIONS

**AERO 151, 152, 1-1. The U.S. Air Force Today. Freshman Year.** An introduction course which outlines the history and doctrine of the United States Air Force. Comprises a study of United State strategic offensive and defensive forces, the Air Force mission and organization, and relationships in supporting security throughout the free world. The course also includes a study of United States general purpose and aerospace support forces within the military complex.

**AERO 251, 252 1-1. The Development of Air Power. Sophomore Year.** This course examines the development of air power over the past 60 years. It traces the evolution of various concepts of air power employment and focuses upon factors which have prompted research and technological change. A variety of events and elements in the history of air power are stressed, particularly where these events provide a significant example of the impacts of air power on strategic and tactical thought.

**AERO 351, 352 3-3. Air Force Leadership and Management—The Professional Officer. Junior Year.** These courses are designed to further develop the student's managerial and leadership abilities. Emphasis is placed on group discussions, seminars, writing and speaking assignments, and appropriate lectures. A detailed examination of the meanings of professionalism and integrity are discussed and exercised through practical experiences. Courses include problem solving exercises and theories of leadership and management.

**AERO 451, 452 3-3. National Security Forces in Contemporary American Society. Senior Year.** These courses are designed to improve the ability to speak and write with accuracy, clarity and dignity of style. Focus is on the Armed Forces as an integral element of society and includes an examination of the broad range of American civil-military relations and the environmental context in which defense policy is formulated. Special themes include: the role of the professional officer in a democratic society, socialization process within the armed services, requisites for maintaining adequate national security forces, political, economic, and social constraints upon the national defense structure, and the impact of technological and international developments upon strategic preparedness and the overall defense policy-making process.

SCHOLARSHIP PROGRAM

High School seniors, college freshmen and sophomores are eligible to compete for four-year, three and one half-year, three-year, and two-year scholarships respectively. Scholarships provide payment of full tuition and fees, and costs of required textbooks, plus a tax free \$100.00 per month subsistence allowance. Selection is based primarily on Air Force Officers Qualifying Test scores, academic performance, and evaluation by a Scholarship Selection Review Board. Interested individuals should contact the Professor of Aerospace Studies or Department Recruiting Officer.



## FLIGHT INSTRUCTION PROGRAM

The Flight Instruction Program (FIP) is an integral part of the AFROTC program. This training provides a nationally standardized evaluation device using Federal Aviation Administration performance standards. The objectives of the FIP are:

1. To motivate qualified AFROTC cadets toward a career in the Air Force.
2. To encourage qualified GMC cadets to enroll in the POC as pilot training applicants.
3. To provide a screening mechanism that will identify those pilot training applicants who lack the basic aptitudes for Air Force pilot training.

The course of flight instruction provides 25 hours of actual flying in a light, land aircraft of 100-200 horsepower with a separate and independent rudder, elevator or horizontal stabilator, aileron control systems, operable wing flaps, tricycle landing gear, and approved by the FAA for flight instruction. This program also includes ground school instruction in weather, navigation, and FAA regulations.

## FIELD TRAINING

### SIX-WEEK FIELD TRAINING COURSE:

This course is designed to prepare the student for enrollment into the POC (AS 300). Primarily, it enables transfer students and others who are unable to enroll in the GMC an opportunity to pursue the Advanced Course and thereby receive a commission in two years of study, coincident with conferral of the Baccalaureate Degree.

### FOUR-WEEK FIELD TRAINING

**COURSE:** This course is designed for the cadet who has participated in the GMC and prepares for enrollment in the POC. This is the cadet's first extended exposure to an actual Air Force environment. Activities include survival training, junior officer training, aircraft and aircrew indoctrination, physical training, career orientation, small arms familiarization, first aid training and a first hand look at the organization and functions of an active Air Force base.

## SPONSORED ACTIVITIES

The Department of Aerospace Studies sponsors the following activities:

1. The AFROTC Drill Team—This team is composed of approximately 30 selected men and women who have demonstrated leadership potential. The team regularly performs at athletic events, parades, and other formal ceremonies.
2. The Arnold Air Society—A national society of AFROTC cadets who excel in character, academics, and exhibit interests in the study of aerospace technology.

3. The Honor Guard—Exceptional General Military Course cadets who perform selected duties at University functions.
4. NCO Academy—An organization of selected cadets whose aim is to develop leadership potential through proficiency in drill and ceremonies.
5. Angel Flight—A national auxiliary of the Arnold Air Society composed of selected coeds who promote esprit de corps, morale, and participate in local community affairs and events.

## ELIGIBILITY FOR PROFESSIONAL OFFICER COURSE ENROLLMENT

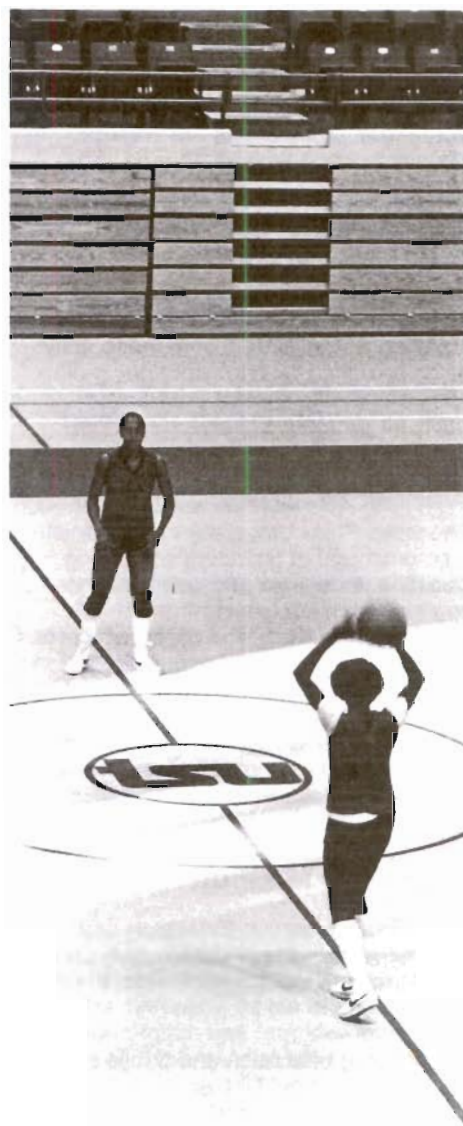
The following are prerequisites for entry into the AFROTC Professional Officers Course (POC):

1. Have either completed the General Military Course, or the six-week Field Training Course. The GMC may be accredited for certain prior military service applicants who meet specific criteria.
2. Have two academic years of college remaining (either graduate or undergraduate).
3. Have achieved a qualifying score on the Air Force Officer Qualifying Test (AFOQT).
4. Execute a written agreement to complete the program and successfully complete the applicable Field Training Course at the specified time and accept an Air Force Reserve Commission, when tendered.
5. Be selected by the Professor of Aerospace Studies.
6. Meet certain specified age requirements and medical standards.

## BENEFITS/GENERAL

All students enrolled in the AFROTC program are provided texts and uniforms at no expense. At the completion of AFROTC courses or when the student withdraws from the course, all texts and uniforms must be returned to the Military Property Custodian. Students who fail to clear their accounts will be reported to appropriate University officials. This may result in delays in receiving clearance for graduation.

Professional Officer Course students (Juniors and Seniors) and all scholarship students receive a monthly subsistence allowance of \$100.00. Those cadets who attend either Field Training Course are paid air travel to and from the encampment, plus a stipend based on current active duty pay scales (approximately \$450.00).





# CONTINUING EDUCATION, EXTENSION AND PUBLIC SERVICE



*Dr. John C. Crothers, Vice-President*

## Introduction

Almost every institution of higher education today finds itself in the early 1980's inevitably involved in an ever-increasing role for credit and non-credit public service and continuing education courses, programs, and activities. Today, more than ever before, many adults are engaged annually in some type of planned continuing education activity. It has been predicted that credit and non-credit adult and continuing education programs will become a major component of American's education systems during the eighties. Tennessee State University is committed to playing a significant role in these activities by providing relevant continuing education and public service programs of quality for professional agencies, business, industry, government, and the public in general.

Tennessee State University has a particular commitment in providing continuing education, extension and public service programs for a society confronted with problems of inflation, energy, health care, civil rights, and many other issues. These issues demand the attention of special interest groups and the publics who seek the University's support as they struggle to maintain professional competence and a sense of real worth in the midst of conflicting forces.

## Mission

Continuing Education, Extension and Public Service is the administrative division of the University responsible, in conjunction with the seven academic schools, for the establishment and maintenance of all continuing education and public service activities of the University including off-campus and weekend credit programs and all non-credit programs and courses;

as well as conferences, institutes and special public service projects. This division also courses the 1890 Cooperative Extension Program unit which provides extension services across the state as part of the University's Land Grant Institution status.

## Student Population

The students served by this division of the university cover the widest of age, professional and economic status ranges. Efforts by the division range from special learning programs for children to on-going continuing education, extension or public service programs for high school students, working adults, low-income elderly, professional organizations, state agencies, business and industrial employers and managers.

## Goals and Developmental Plans

1. To provide night and day credit courses, at centers or on weekends, for adults who are unable to undertake regular, full-time or part-time study at the University.
2. To provide non-credit programs, courses, conferences and institutes for special groups and the general public.
3. To provide continuing education and public service programs designed to meet the occupational, vocational and avocational needs of adults in the community.
4. To provide opportunities for employment training to improve skills and knowledge needed in current and projected occupations.
5. To improve managerial skills of individuals employed in business, industry, and government.
6. To provide assistance in planning programs of community health, community development, family life and leisure time activities.
7. To increase citizen participation in civic affairs through greater aware-

ness of public affairs; community and national problems; local, state and national government.

8. To provide cultural enrichment of the community in such areas as art, literature, music, drama, speech and reading.
9. To provide specialized extension programs and staff to serve the urban community and its special needs along with the rural communities now served by the 1890 Cooperative Extension Program.
10. To provide extended programs throughout Middle Tennessee and the rest of the state in response to the Land Grant mission and emerging comprehensive University status of the institution.
11. To seek and obtain external funding for special projects of both short-term and long-term duration which can either supplement or be adopted into on-going programs and services of the University.
12. To provide for internal faculty and staff development programs which will serve the needs of all academic and administrative units at the institution.
13. To increase cooperative planning and delivery of educational services with other state agencies and institutions and selected private institutions.
14. To provide outreach sites and centers for the delivery of credit classes and special programs.

## Organization and Structure

Designed to assist Tennessee State University in fulfillment of its mission of service, the division reports directly to the President of the University and to the Continuing Education and Public Service Council, a panel of representatives from all the academic schools of the University. The Public Service Advisory Committee, a selected group of leaders and lay representatives from both the private and public sector of the community, contributes to the identification of service and establishment of priority of continuing education and public service needs of the local area.



Units	Departments	Programs
Continuing Education	Non-Credit Instruction	CEU Courses
	Public Service Center	CEU and Special Programs
	Conferences and Institutes	Conferences, Institutes and Seminars
	Extended Credit and Off-Campus Programs	Credit Courses and Programs
Extension	1890 Programs	Land Grant Extended Services and Programs
Public Service	Center for Urban and Public Affairs	Applied Research and Service with Government and Public Agencies
	Tennessee Learning Center	Labor Studies
	Contract Testing	Test Administration for Professional Organizations and State Agencies
	Military Occupational Specialty Training	Library Administration
		Test Administration
		Instructional Classes
	Comprehensive Employment Training Act Programs	On-campus employment and training
	Tourism Education	Hospitality Training

grams in several disciplines, correspondence offerings, and liberalized early admission procedures for entering freshmen are a few examples of the University's commitment to its mission of Continuing Education.

Special courses of study delivered on and off campus have long been a distinct service of Tennessee State University. Presently, Continuing Education's activities are also being fused with innovative, non-traditional, flexible modes through which credit and degrees may ultimately be earned.

**EXTENDED CREDIT AND OFF-CAMPUS CENTERS**

In cooperation with other agencies and educational institutions as well as through its own initiatives, Tennessee State University provides a variety of undergraduate and graduate credit courses within the Middle Tennessee area. Some of the present locations in the Nashville area where courses are offered are Columbia, Franklin, Gallatin, Ransom Teachers Center, and McGavock and Whites Creek Comprehensive High Schools.

**CONFERENCES AND INSTITUTES**

Continuing Education, through its Conferences and Institutes office, provides an opportunity for participants, members of the University community, and highly qualified resource persons to share new information and explore new ideas that will improve their job performance or complement their academic interest. These conferences and institutes are tailored to reflect the needs of the requesting client group.

The format used in short courses and seminars varies with the type of program, but always is designed and tailored to meet expressed needs of the services groups. Whether credit or non-credit oriented, short courses and conferences are designed by the division to reflect the sponsorship of selected academic schools of the University.

**EARLY START PROGRAM**

This program is designed to admit high school seniors to the University for the purpose of enrolling in Freshman English, History or Mathematics. Applicants must possess a 3.00 grade point average on a 4.00 system for the high school work completed. The recommendation of either the principal or guidance counselor at the student's respective high school must accompany the application and high school transcript.

Three (3) semester hours of credit will be awarded for each 45 clock hours of

The standards of the National University Continuing Education Association and the Association for Continuing Higher Education are met in all continuing education affairs.

**Conclusions**

The Decade of the Eighties will see a continuing expansion of the University's involvement in providing outreach and extension of its academic expertise to the community and state. Continuing Education enrollments will increase several fold in both non-credit and credit programs. Cooperative Extension will continue to grow as federal and state support increases: Public Service programs will increase with a particular emphasis upon services to the urban community. The overall result will be the development of new student and client groups which use the University's services, facilities and faculty to further their particular educational needs.

**GRANTS AND CONTRACTS DEVELOPMENT**

The institutional search for supplemental funding of educational service and applied research is coordinated from within the division by the Grants and Contracts Development Office. An advisory committee serves both the faculty and staff and the Office of the Vice President in goal identification and priority determination in search for external funding support. This effort is coordinated with the Office of the Vice President for Research and Development. Assistance to faculty and staff in

grant and contract proposal development is rendered in those instances where grants and contracts are not initiated and developed within this office. This office maintains a resource library of materials related to grant writing and funding search. Program and application files are kept for most major federal and state agencies as well as private foundations.

An advisory committee of project directors advises the office in making recommendations to the President and appropriate Vice Presidents regarding policies and procedures of the University which impact on development and operations of sponsored projects. The Director of Grants and Contracts also serves as an ex officio member of the University's Research Advisory Committee representing concerns related to development of sponsored projects as well as continuing education and public service. In addition, the Director assists the Vice President for Continuing Education, Extension and Public Service in reviewing and approving all university contracts for Continuing Education and Public Service.

**CONTINUING EDUCATION**

Tennessee State University invites and extends opportunities to individuals to continue vocational, avocational or professional education and training through off-campus credit and non-credit classes, seminars, conferences, institutes, and foreign travel and study. Additionally, the selected provisions for open and closed-circuit television instruction, proficiency and C.L.E.P examinations in numerous courses, cooperative work-study pro-



acceptable classroom performance by each student. Students may enroll in a maximum of six (6) credit hours at any given term. The fees charged per semester hour will be the same as other undergraduate courses.

The courses are English 101, 3 hrs. credit; History 201, 3 hrs. credit; Math 111, 3 hrs. credit. The following charges are made for students entering TSU: application fee \$5.00 and current fee per credit hour.

This program is sponsored jointly by the Metropolitan Community Education Schools Program and TSU. The Centers are located at Glenclyff, East and Pearl High Schools. However, the courses are available to all high school students who qualify.

### NON-CREDIT INSTRUCTION

One of the largest areas of instructional effort at the University occurs in the department of non-academic instruction. The Office of Non-Credit Instruction plans both on a semester basis as well as in service to special needs on and off campus. This instruction is supported by regular and part-time faculty alike and is designed to meet the special needs of learners, both vocationally and avocationally. Planning for such learning occurs with direct input from learners and all instruction is also based upon participatory evaluation rendered by those who are enrolled. Most instructional activities are offered for enrollment on an individual fee basis, but selected activities are planned with client groups and delivered under special contracts. Standard IX of the Southern Association of Colleges and Schools is followed in the presentation of all instruction. Continuing Education Units (CEU), as provided by the Southern Association, are awarded to participants in that selected instruction planned within the Association's guidelines. Institutional records of such learning are maintained by the Admissions and Records Office and are available upon student request.

## COOPERATIVE EXTENSION (1890 Programs)

The mission of the Cooperative Extension Service of the University is to extend information, which has been collected and assembled, to the citizens of Tennessee.

This program involves the maintenance and improvement of agricultural enterprises, including herds (dairy, beef cattle, and swine), flocks, farm crops, pasture and hay crops, vegetable crops, fruit crops and ornamental plants. Other aspects of the service include:

- farm record keeping and marketing of farm products;
- the dissemination of agricultural literature through local, regional, and state farm and home institutes;
- the promotion of the business of farming through fairs, exhibits, horse shows, and publicity;
- the supply of important agricultural information to farmers from state and federal sources;
- the improvement of rural and urban family living through education and proper use of resources; and
- the promotion of low-cost homes and farm buildings for rural and low-income families.

In 1911 the General Assembly enacted legislation which enabled Tennessee State University to apply for and benefit from funds appropriated under the Morrill Act of 1862, the Hatch Act of 1887, and the Morrill Act of 1890, but no subsequent action was taken by this body to allow the University to participate in the Smith-Lever funds that come to the State for the Statewide Cooperative Extension Service. The Statewide Cooperative Extension program has received Smith-Lever funds since May 1, 1914.

The Cooperative Extension Service is the educational arm of the United States Department of Agriculture. This service was created by an Act of Congress of 1914 known as the Smith-Lever Act. The Cooperative Extension Service in the various states is based on the campuses of the land-grant Colleges and Universities. In the South and in the border States two types of land-grant colleges exist: the predominately white college, known as the 1862 institution and the predominately black college, known as the 1890 institution. In Tennessee, the 1862 school is the University of Tennessee at Knoxville.

In 1971, special funds were set aside by the Congress to enable the 1890 schools and Tuskegee Institute to carry out a Cooperative Extension program. This Act specified that only one Extension program should exist in each State and that the 1862 and the 1890 land-grant institutions would administer the program jointly. Subsequent to the Act, Tennessee State University and the University of Tennessee entered a memorandum of understanding which described the manner in which the two institutions would plan and administer programs jointly. Such togetherness was unique to Cooperative Extension programs in States having an 1890 land-grant institution.

Most efforts of Tennessee State University staff and the staff of the University of Tennessee are concerned with training County staff and serving in a professional

resource capacity. The County staff in turn are responsible for programming for the general public.

Cooperative Extension staff based at the two universities are termed specialists. The nature of the work of these specialists is concerned with informational supply and problem solving for the County extension leaders. In the ultimate, the aim of the specialist is to elevate the quality of life of the people living within a given sector. To be more specific, the specialist's time is devoted to study and research; construction of audio-visual aids; preparation of handout materials; and writing articles, papers, and radio and TV scripts. In addition to this the specialist visits County Extension offices, conducts workshops, and participates in staff and in-service meetings.

Continuing education (CEU) courses offered by the division have credit value measured in continuing education units (CEU). One CEU is defined as "ten contact hours of participation in an organized continuing education experience under responsible sponsorship, capable direction and qualified instruction." Programs in Continuing Education are interdisciplinary in nature, thereby encompassing a wide variety of offerings based upon the Continuing Education and Public Service needs of the community from time to time. The University will work with any individual or organization in designing an educational program around their needs.

The Statewide Cooperative Extension Service receives funds from the Congress through the Department of Agriculture and from the State and County. The Cooperative Extension Service of Tennessee State University receives regular funds from the Department of Agriculture and from no other source.

## PUBLIC SERVICE CENTER

The Public Service center coordinates all Main Campus Non-Credit Continuing Education Activities. The center includes six categories of Continuing Education activities.

- (1) Non-Credit Instruction through CEU courses.
- (2) Special Training Grants and Contracts.
- (3) Human Service Research Activities.
- (4) Conferences and Institutes.
- (5) Center for Government Training Courses.
- (6) Senior Citizen Enrichment Program and Consumer Education Workshops.



## PUBLIC SERVICE

The Public Service unit serves as a brokerage in the provision for the delivery of University resources to the community. In addition to coordination of consultant services delivered by selected staff and faculty to industrial and business firms, governmental agencies and groups, the division searches from within the broader University and statewide University community for resources to assist in answering requests for services. Readily available to the University are the State Board of Regents System and such University of Tennessee System agencies as: Municipal Technical Advisory Service; County Technical Assistance Service; Center for Government Training; Center for Industrial Service; and the Technical Assistance Center.

### PUBLIC SERVICE PROJECTS

An important service offered by Continuing Education, Extension and Public Service is its public service projects. This activity involves the university in special skills training and service programs in conjunction with local and state government as well as the private sector. The division supports the following special projects:

- \* CETA Projects (Comprehensive Employment and Training Act)
- \* Senior Citizens Enrichment Program and Consumer Education Workshops
- \* Tennessee Learning Center (Labor Studies Program)
- \* Tourism Education
- \* Military Occupational Specialties Training (for Ft. Campbell employees)
- \* Contract Testing Center
- \* Center for Urban and Public Affairs
- \* Center for Government Training Programs (for Government Employees)
- \* Center for Industrial Services Programs (for Business and Industry)
- \* Energy Conservation Programs
- \* Rural Land Research
- \* Special Teacher Training Programs (Credit and Non-Credit)
- \* Departmental Projects and Workshops (Academic Schools)

### CETA PROJECTS

The CETA projects funded by the Department of Employment Security provide employment, counseling and training to individuals and students from the non-metropolitan community who are in need of opportunities and experiences which will better prepare them for permanent employment either in clerical or staff positions at the university or for skilled labor positions in the community at large.

### SENIOR CITIZENS ENRICHMENT PROGRAM AND CONSUMER EDUCATION WORKSHOPS

The senior citizens enrichment program and the consumer education program provide an opportunity for faculty, staff persons, and the Tennessee State University community to extend their knowledge and expertise to interested community persons through a service of workshops covering a wide variety of topics based upon community needs. This includes classes for senior citizens and young adults. These workshops are held at various locations in the community.

### TENNESSEE LEARNING CENTER

The Tennessee Learning Center is a State of Tennessee Department of Labor funded educational unit. The center, formed through a contract between TSU and the Department of Labor, is headquartered at the TSU downtown campus. All its educational services to labor union members and their organizations are delivered by and through a consortium of State Board of Regents and University of Tennessee institutions located throughout the state.

The programs of the center provide instruction in all areas of labor studies, including labor management, relationships and negotiation, labor law, arbitration, grievance procedures and steward training, interpersonal communication and relationships, leadership, and other such related subjects. These programs are conducted in class rooms of institutional consortium members throughout the state, in union halls or in other available meeting rooms conducive to the learning process.

The center serves Tennessee, the 26th state to provide such continuing education service for the labor community. It is an institutional member of the University and College Labor Education Association.

### TOURISM EDUCATION

The Tourism Education Project is a funded effort from the Nashville Metropolitan Tourist Commission. The project provides educational training to personnel in business, industry and government agencies in the Nashville area to assist them in more effectively relating to tourists visiting Nashville. Training is provided to employees at their work sites through the use of video tapes, lecture and discussion.

### CONTRACT TESTING

An important service to selected governmental agencies and professional groups is fulfilled in the form of contract testing. The University not only provides this service to the convenience of the Middle Tennessee area but also it supervises test centers for selected state licensing agencies in Memphis, Jackson,

Chattanooga, and Knoxville. Additionally, individual correspondence and standardized examinations of other forms are proctored as requested.

### CENTER FOR URBAN AND PUBLIC AFFAIRS

The Center for Urban and Public Affairs is a joint program of Middle Tennessee State University, and Tennessee State University, established in 1976. In broad terms, the Center's mission is identical to that of the participating universities and thus compliments their roles and scopes. The Center's objective is to develop programs effectively linking the teaching, research, and public service resources of MTSU and TSU, in the area of urban and public affairs. This is analogous to the approach which proved so valuable to society in the fields of agriculture and industry—organizationally and programmatically linking teaching, research and service. Applied research and public service training activities, involving the faculty of the two participating universities, serve public and quasi-public agencies in Tennessee.

### MILITARY OCCUPATIONAL SPECIALTIES TRAINING PROJECT

This project is a university sponsored activity located at Ft. Campbell, Kentucky. It is composed of three components. They are: an instructional activity which is designed to raise the competency of the servicemen within their military specialties; an administrative service which includes the administration and management of the Base's military libraries; and, a management responsibility for the administration of all military occupational specialty tests. This project is delivered under a formal contract which is renegotiated annually.

### PUBLIC SERVICE PROJECTS LOCATED IN ACADEMIC SCHOOLS

Several public service projects which are administered through the academic schools of the university receive assistance and support from the Division of Continuing Education, Extension and Public Service. These projects include:

1. Center for Community Education serves as the statewide facilitator to develop partnerships between public schools and the community to improve the overall quality of life. The center receives the sole Mott Foundation Grant for this purpose.
2. Head Start Training Office—Center for Training and Technical Assistance is a contractually funded project within the



Center for Training and Technical Assistance. The services provided in credit and non-credit instruction are delivered in 80 Tennessee counties, and include programs in administration, fiscal management, parent involvement, education, social services, health and handicap services. Approximately 2,000 staff and 8,100 parents of Head Start children receive some assistance from the center. In 1979-80, approximately 25,000 hours of planned instruction was provided. Also, the Center has cooperative training agreements with several agencies of State government.

3. Educational Resource Development Council is a consortium of Middle Tennessee schools systems with the School of Education. The ERDC Project works with systems to bring together the school's faculty expertise with public school personnel to resolve local problems and to provide in-service training.
4. Small Business Development Center serves as the University's focal point for assisting individuals interested in establishing a small business, or improving management of existing businesses.
5. Center for Real Estate Education is the University's organizational structure for serving the educational needs of the Tennessee Real Estate Commission, and the real estate educational interests of university and local area students.
6. Robert A. Taft Institute of Government Seminars in Practical Politics is a funded project designed to improve student understanding of the practical and applied concepts of government at the local, state, and national level.

## NON-CREDIT COURSE DESCRIPTIONS

### GENERAL

**CEU 2424. Maintenance Skills Training. (1-3)** The Maintenance In-Service Training program is designed to provide instruction and demonstration of the latest concept of professional cleaning and maintenance.

**CEU 2425. Writing Clinic. (1-3)** The seminar is designed to help participants acquire new writing habits, improve competence in writing and promote positive attitudes toward written composition.

**CEU 2426. Career Focus. (1-3)** This course is designed to assist students in assessing interests and abilities, and to clarify personal values and to fashion a life pattern for career and personal development. Students will have an opportunity to develop goals, explore options for alternative lifestyles, and make career decisions.

**CEU 2427. Problems of the Aged. (1-3)** This course is structured to give the aged information on the following areas: Clothing for

the season, safety, health care, social security, crime and loneliness.

**CEU 2428. Child Development. (1-3)** The course consists of 14 hours of in-service training for human service workers in the area of child development.

**CEU 2429. Basic Skills. (1-3)** This seminar deals with national issues in education with emphasis on the basic skills: Reading, Writing and Arithmetic.

**CEU 2430. Learn to Sew. (1-3)** A beginning course on modern techniques of sewing. This course includes pattern selection as related to body measurements, alterations, fabric selection with emphasis placed on "easy-to-sew" patterns and completion of simple garments.

**CEU 2431. Developing Skills in Grantsmanship. (1-3)** This seminar is for interested professional and community representatives interested in increasing Grantsmanship skills. The seminar is designed to provide technical assistance in writing proposals and grant administration.

**CEU 2432. Family living. (1-3)** This one day institute is designed to provide information to farmers, homemakers and ministers on methods of stabilizing, family living in a changing economy.

**CEU 2453. Human Relations and Communications. (1-3)** This seminar provides in-service training for Human Service workers. The seminar emphasizes communications and Self-Awareness. The purpose of the seminar is to increase the practitioner's communication skills and to broaden the knowledge of the practitioner's self-awareness.

**CEU 2455. Swimming—Beginners (For Adults). (1-3)** This class is for those individuals who have never learned to swim and would like the opportunity to learn. The objective of the course is the development of sufficient skills to enable you to safely perform in water.

**CEU 2456. Communication (Human Services). (1-3)** This course deals with communication problems. This session deals specifically with reaching the difficult to reach client, chronically ill, hostile, physical and emotionally disabled clients.

**CEU 2458. Physical Fitness for the Young Adult. (1-3)** These classes are structured to give the young adult information that will help him realize a more healthful body and mind.

**CEU 2459. Gerontology. (1-3) Section 1** A seminar on Aging. This course explores the Biology and Physiology and Economic aspects of Aging, age-related programs, agencies and groups.

**CEU 2459. The Older American Behavior and Communication Problems. (1-3) Section 2** This seminar is designed to provide practical information to professionals, para-professionals and others who work with or know communicatively impaired elderly persons.

**CEU 2462. Ladies Slimnastics. (1-3)** This class emphasizes body development, exercise and weight reduction. The program will enable

the individual to become aware of the need for physical fitness. Also to help the individual to firm and trim the body muscles through exercise.

**CEU 2470. Federal Income Tax. (1-3)** This Federal Income Tax Seminar consists of five 2 hour class sessions on Income Tax Preparation.

**CEU 2475. Financial Management and Accounting Seminar. (1-3)** This course provides 30 hours of instruction in fundamental accounting principles. The course is designed to teach basic accounting equations and how these equations work.

**CEU 2476. Photography. (1-3)** The Fundamentals of the Photographic Process. The proper use and maintenance of the camera.

**CEU 2477. Gardening. (1-3)** This course is designed to familiarize the beginning gardener with the requirements for a healthy, happy vegetable garden. Instruction will include: principles and practices of organic gardening, soil types, soil analysis, garden insects and biological control, soil microbiology, fertilizer requirements, and vegetable varieties. Good ecological practices will be stressed.

**CEU 2478. GED Preparation. (1-3)** The General Education Development Program (GED) is designed to assist persons who wish to take the General Education development Program Test and achieve the equivalence of a high school diploma.

**CEU 2479. Seminar for Successful Secretaries. (1-3)** This seminar is designed to improve the secretarial skills of secretaries, receptionists and other office workers.

**CEU 2480. Reading Improvement for Adults. (1-3)** A course designed to increase reading comprehension and speed; provides for individual needs by beginning each student at a comfortable level and progressing the activity to increase rate and comprehension.

**CEU 2482. ESL (Oral Expression). (1-3)** This course includes the teaching of English grammar and lexicon to international students. To develop an understanding of English grammar.

**CEU 2483. ESL (Composition). (1-3)** To acquaint the international student with simple writing skills. To introduce students to simple reading materials for interpretation.

**CEU 2485. Communications (Sign Language). (1-3)** This course is for persons who would like to learn Sign Language.

**CEU 2487. Tailoring. (1-3)** This course is designed for the person who desires to develop the ability to make more difficult pattern alterations, use of more complicated patterns, use and care of fabrics requiring special treatment. Completion of at least one garment using more advanced techniques and details which give individuality to the garment, will be required.

**CEU 2488. GRE and General Math Review I. (1-3)** This course includes a review of arithmetic procedures, basic algebra and basic geometry. It is especially designed for those studying for the Graduate Exam, Civil Service Test, Scholastic Aptitude Test, or any other test



requiring a thorough knowledge of high school mathematics.

**CEU 2496. Interior Decoration. (1-3)** A discussion of the principles that are involved to create unity in decorating a room or a whole area, i.e., walls, floors, furniture. Materials needed for the class, tracing paper, 1/4" grid paper, pencils, and eraser.

**CEU 2497. Basic Puppetry. (1-3)** Basic Puppetry, Introduction, Basic Puppet Operations, Introduction to writing, selective writing, custom writing, puppet stage designs and equipment.

## SCHOOL OF ARTS AND SCIENCES

**CEU 1401. Oil Painting I. (3.0)** Instruction is highly individualized except when problems arise where discussion would benefit the entire class. Attention is focused on recent advances in paint chemistry in relation to glazing techniques. Beginners may enter this class.

**CEU 1402. Oil Painting II. (3.0)** This is a class for advanced students; therefore, previous experience is necessary for admission.

**CEU 1412. Watercolor Painting I. (3.0)** The techniques of watercolor painting, landscape and figure compositions.

**CEU 1413. Watercolor Painting II. (3.0)** Continuation of 1412. The technique of watercolor painting, landscape and figure compositions.

**CEU 1414. Introduction to Stained Glass. (3.0)** History of stained glass, examples of various styles, basic techniques of stained glass making.

**CEU 1418. Antique Frame Restoration. (3.0)** Restoration techniques for antique mirror and picture frames. Techniques of plaster build-up, the preparation of moulds, and gilding techniques will be demonstrated. Participants will be given studio experience.

**CEU 1419. Painting. (13)** This course covers experience in various media, e.g. drawing, oil, watercolor and pastel. The media depends upon preference of the studies. The course may be entered at any level of development.

**CEU 1420. Assignment: Portfolio. (3.0)** This course is designed to assist the student in compiling a photographic portfolio which reflects each individual's photographic style, achievements and capabilities.

**CEU 3502. Basic Public Relations. (3.0)** Theories and principles, persuasion and public opinion, publicity organizations, techniques and tools and practical examination of methods of communication.

**CEU 3505. Feature Writing. (3.0)** Instruction and practice in writing feature articles for public relations, newspapers and magazines. Possibilities for free-lance writing.

**CEU 3701. Pre-College Algebra I. A** programmed approach to the topics in algebra normally covered in the first year of high school algebra. This course may be used to remove a deficiency of one unit of first year high school algebra.

**CEU 3702. Pre-College Algebra II.** This course is a coverage of second year high school algebra, and may be used to remove a deficiency of one unit of second year high school algebra.

**CEU 3703. Pre-College Algebra III.** Second quarter of a two quarter sequence. Must be taken in addition to 3702 to remove one unit of second-year high school algebra.

**CEU 3704. Geometry.** A coverage of high school level geometry necessary for engineering and science majors.

**CEU 3901. Beginning Guitar I. (3.0)** Focus on techniques, reading music scores, positions, studies and development of solo pieces. Students are required to provide their own nylon-stringed instruments.

**CEU 3902. Folk Guitar. (3.0)** Basic chords, how to tune guitar, sing folk songs, strum, finger pick, and styles used by various folk groups. Must provide own guitar.

**CEU 3909. Advanced Guitar II. (3.0)** This course is designed for the student who has mastered the basics of guitar. More complex chords and reading more complex music will be emphasized.

**CEU 3911. Fundamentals of Commercial Songwriting. (3.0)** Instruction designed to present proven techniques in songwriting to persons interested in exploring the subject for enjoyment or for career purposes.

**CEU 3912. Advanced Techniques of Commercial Songwriting. (3.0)** Instruction designed to serve those who have satisfactorily completed the "Fundamentals" course, or by background or experience, have the capacity to profit from the advanced course.

**CEU 3913. Bluegrass Banjo. (1.0)** Five-string banjo played in three-finger Bluegrass style. No prior music reading ability necessary.

**CEU 3914. Country Fiddle. (1.0)** Group instruction in Country and Bluegrass fiddling.

**CEU 3916. Professional Techniques of Commercial Songwriting. (3.0)** Instruction designed to serve those who have satisfactorily completed the "Advanced" course or, by background of experience, have the capacity to profit from instruction at the professional level.

**CEU 4305. Bridge for Beginners. (3.0)** This course is for all interested in learning how to play Bridge, as well as for individuals who know how to play, and want a "Brush-up" experience.

**CEU 4507. Transactional Analysis. (3.0)** An indepth study into how people interact with one another, the roles people play in various situations, and the models from which people obtain their various roles. Insight into one's personal actions and reactions to others as they act and react to oneself.

**CEU 5101. Conversational Spanish. (3.0)** Emphasis on conversation and basic vocabulary for the traveler or businessperson.

**CEU 5102. Conversational French. (3.0)** Emphasis on conversation and basic vocabulary for the traveler or businessperson.

**CEU 5104. Conversational Italian. (3.0)** Emphasis will be on conversation and basic vocabulary for the traveler or businessman who needs a working knowledge of the language of Italy, art, culture, literature, and the Italian way of life will be among the topics of discussion.

**CEU 5105. Conversational German. (3.0)**

**CEU 5106. Conversational Russian. (3.0)** Conversation and basic vocabulary for the traveler or businessman who needs a working knowledge of Russian.

**CEU 5107. Advanced Conversational Spanish. (3.0)** This course begins where the basic conversational Spanish class ends. Emphasis on conversational patterns, essentials of grammar and good knowledge of the Spanish vocabulary.

**CEU 5108. Conversational Chinese. (3.0)** Emphasis on a working knowledge of the Mandarin dialect of conversational Chinese for the traveler or person seeking a more thorough knowledge of Chinese culture.

**CEU 5110. Intermediate Conversational French. (3.0)** This course is addressed to students whose French language skills need more advanced and fluent levels of self expression. Accent will be on helpful topics of daily conversation—on the intermediate level—with current idiomatic expressions. Moreover, emphasis will be on comprehension and improved skills in the use of the spoken language, strengthened by underlying grammatical structure. Prerequisite: Conversational French or equivalent.

**CEU 5302. Pre-Retirement Planning. (3.0)** Retirement, income, money management, physical and mental health, housing, legal issues, leisure and utilization of community resources.

## SCHOOL OF BUSINESS

**CEU 1111. How to Proceed in Business—Legally. (3.0)** This course will aid small business owners in formulating documents and procedures to comply with governmental regulations. Various aspects of business structure, reporting, and business practice will be discussed.

**CEU 1602. Career Management for Professionals. (3.0)** This course is designed to enable professionals, such as teachers, accountants, lawyers, and others to analyze themselves and their marketability so that they may more effectively manage current careers or develop new career goals to reflect changing lifestyles. Participants will cover motivational needs, positive self-images, life-stage needs, identifying strengths and weaknesses, career renewal and development, career and personal skill analysis, and reality testing.

**CEU 1801. Certified Professional Secretary. (5.2)** For secretaries preparing for Certified Professional Secretary Examination, Environmental Relationships in Business, Business and Public Policy, Economics and Management, Financial Analysis and the Mathematics of Business, Communications and Decision Making, and Office Procedures.

**CEU 1901. CPA Review-Law. (2.4)** Logical approaches to solution to varying types of



questions found on the Commercial Law section of CPA examination.

**CEU 1902. CPA Review-Practice. (2.4)** Covers accounting practice problems as given in prior examinations by the American Institute of Certified Public Accountants.

**CEU 1903. CPA Review-Theory. (2.4)** Comprehensive review of topics covered on Accounting Theory section of the examination.

**CEU 1904. CPA Review-Audit. (2.4)** Comprehensive review of topics covered on Auditing section of the CPA examination.

**CEU 2212. Personal Insurance-Lutc. (6.5)** Part I offers the career life underwriter practice on-the-job training in life insurance as property competitive investment media, programming multiple needs and credentials of a career salesman.

**CEU 2213. Disability Income-Lutc. (3.3)** Covers wide variety of health insurance policies from a sales viewpoint, proven field methods for life and health, and selling methods.

**CEU 2214. Business Insurance-Lutc. (6.5)** Part 2 offers career life underwriter practical on-the-job training in sales and purchase agreement, estate planning and life insurance business terminology.

**CEU 2215. Equities-Lutc. (3.3)** Sale of equities, mutual funds, and variable annuities for career life underwriters.

**CEU 2304. Insurance and Business Law CPCU Review IV. (3.0)** Insurance and business law principles and practices, fundamentals to prepare candidate for national chartered property and casualty underwriter examination.

**CEU 2909. Introduction to Investments. (3.0)** Designed for novices who would like to learn about investment. Reasons for investment and the characteristics of the ideal of history and operation investment; the New York Stock Exchange, discussion of different investment products, ways of determining the right investment and who to look for in a product to satisfy your wants, retirement plans, and current events or questions relating to the topics will be discussed.

**CEU 2910. Financial Planning I: Counseling the Individual. (4.5)** Counseling the individual (CFP I) is an introduction to investment and theories. The why's and how's of planning will be explored, and various investment opportunities will be discussed.

**CEU 3203. Fundamentals of Management for First-Line Supervisors. (3.0)** This course is designed to train persons who are now or may be expecting to be first-line supervisors or operative managers. The functions of management will be stressed and all phases of dealing with people, reduction programs, safety, and operative practices in industry will be discussed.

**CEU 3207. New Venture Management. (3.0)** For those interested in establishing their own business or purchasing a business already in operation. Covers business opportunity, borrowing money, selling stock, incorporating ver-

sus proprietorship, and organizing business. Guest speakers: attorney, commercial banker and an accountant.

**CEU 3210. Small Business Management. (3.0)** For small business managers and their employees. Competition, market factors, success and failure, records and credit management, marketing, advertising, selling, sales promotion, and leadership.

**CEU 3605. Development and Marketing of Tourism. (3.0)** An introduction to the field of tourism. The development of tourism at the regional, national and international level is studied. Current marketing, research, and economic considerations are examined.

**CEU 3606. Introduction to Travel Agency Operations and Management. (3.0)** A comprehensive survey of retail travel agency operations in relation to domestic and international tourism, and commercial travel. Special attention given to transportation, accommodations, attractions and the relative functions of airlines, cruises, tour operators, wholesalers and retail agents. The management portion will include personnel selection and training, advertising and promotion, the impact of automation on agency operations, and a practical study of day to day operations of the agency. Observational on-site visits to travel agencies will give practical exposure to lecture material presented. Course content will be tailored to the experience level of the registrants.

**CEU 4101. Medical Secretary Assistant I. (3.0)** Telephone technique, patient and public relations; record keeping, filing, basic business English, letter writing, office machines, legal aspects, emergencies, paramedical relations, manners, appearance and attitude. One of a series leading to the Medical Secretary Assistant Certificate.

**CEU 4103. Beginning Typewriting. (2.5)** For students with no previous training in typewriting. Development of typewriting skills, letter writing, tabulation, and reports.

**CEU 4104. Beginning Shorthand I. (3.0)** Theory of Gregg Shorthand, development of dictation and transcription abilities. For students with no previous training in shorthand.

**CEU 4105. Beginning Shorthand II. (3.0)** Continuation of theory of Gregg Shorthand, development of dictation and transcription abilities. For students who have completed Beginning Shorthand I or the equivalent.

**CEU 4108. Typist Development. (2.0)** Development of typewriting skills; special emphasis on letter writing; tabulation, and reports.

**CEU 4110. Executive Secretarial Procedures. (2.0)** Telephoning techniques, record keeping, sources of information required by secretaries, office machines, and office etiquette.

**CEU 4114. Shorthand Development. (3.0)** For those who can take 60 words a minute or above, theory of Gregg Shorthand, development of dictation and transcription abilities.

**CEU 4117. Office Systems (Filing and Records Management. (2.0)** Routines and pro-

cedures for handling correspondence and mailing; filing systems; oral communications; office planning and layout; systems of control.

**CEU 4119. Court Reporting I. (3.0)** First of a series designed to instruct student in theory of the shorthand machine. Court reporting field, medical, legal, technical, scientific, and executive secretarial positions.

**CEU 4120. Court Reporting II. (3.0)** Continuing study of basic theory of the shorthand machine. Emphasis on speed building and accurate transcription.

**CEU 4121. Court Reporting III. (3.0)** Further development of skills needed in the use of the shorthand machine. Intensive practice in specialized dictation, reading, and transcription.

**CEU 4122. Court Reporting IV. (3.0)** A continuation of Court Reporting III, with emphasis on advanced speed building in touch shorthand.

**CEU 4123. Court Reporting V. (3.0)** Advanced skill development on the shorthand machine with emphasis on specialized court reporter vocabulary.

**CEU 4124. Court Reporting VI. (3.0)** A continuation of Court Reporting V, with emphasis on Advanced speed building in machine shorthand using court testimony as dictation material.

**CEU 4125. Court Reporting VII. (3.0)** A continuation of Court Reporting VI, with emphasis on advanced speed building in machine shorthand using court testimony as dictation materials.

**CEU 4126. Court Reporting VIII. (2.5)** A continuation of Court Reporting VII, with emphasis on advanced speed building in machine shorthand using court testimony as dictation material.

**CEU 4140. Medical Terminology. (3.0)** This course is for those persons studying in the field of medicine or the paramedical fields (medical secretaries, medical librarians, medical assistants, etc. who feel the need to renew or increase their vocabulary, and people in the world of business (insurance, law, etc.) who have frequent contact with the world of medicine.

**CEU 4143. Legal Terminology. (3.0)** This course is for those persons studying in the field of law (legal secretary) or the paralegal fields (court reporting secretaries, insurance secretaries). The course will familiarize the students with the legal terms that they will encounter as professionals which may be unfamiliar to law people.

**CEU 4144. Word Processing Systems Design. (3.0)** This course is designed as an introduction to the basics of word processing for business executives, office managers and other office employees who are interested in improving office productivity. It will focus on the planning, implementing, and monitoring of word processing equipment through the areas of document origination and production.

**CEU 4146. Human Resource Management for First-Line Supervisors. (3.0)** This course



is designed for first-line supervisors or operative managers with two or more years experience. It emphasizes strengthening skills in the behavioral areas of management including motivation, leadership, communication, goal setting, conflict management, and organization development.

**CEU 4601. Basic Purchasing Management. (3.0)** The specific objectives of this course for the newly appointed buyer is to develop insights into major objectives/concepts of purchasing management, to broaden the participant's knowledge of economics, marketing and management as they apply to purchasing, and to encourage individuals to think independently and creatively about the issues and problems confronting purchasing managers.

**CEU 4602. Advanced Purchasing Management. (3.0)** To develop insights into major concepts of purchasing management, to broaden participant's knowledge of materials management, legal aspects of purchasing, inter-personal relations, and traffic management.

**CEU 5012. Real Estate Fundamentals. (3.0)** Basic survey course designed to prepare persons for the Tennessee Affiliate Brokers examination; utilizes student manual in outline form written specifically for Tennessee which includes topics of both a generic and specific nature covered in accordance with present Educational Testing Service Standards; includes instruction on "how to take examinations" with format used by Educational Testing Service.

**CEU 5019. Real Estate Mathematics. (3.0)** This course is designed to familiarize the student with mathematics techniques common to the real estate business. Topics covered include: percentages, fractions and decimals, area and volume problems dealing with commissions, leases, appraising, mortgages (principal and interest), and prorations. Special emphasis is placed on logical problem solving with a minimum reliance on formulas.

**CEU 5020. Real Estate Law. (3.0)** The course covers multiple legal concepts as they impinge upon the acquisitions, ownership, development, and operation of real estate assets, including definitions of realty vs. personality legal implications of forms of ownership and titling of property, financing and security interests, taxation, and the relationships of brokers, landlord and tenant. Also covered are governmental regulations affecting real estate development and usage.

**CEU 5021. Real Estate Investment and Taxation. (3.0)** The course addresses acquisition, ownership, and disposal of real property. Also covered is risk and return, and tax provisions affecting real estate investment—including capital gains and losses, installment sales, and tax deferred exchanges.

**CEU 5022. Real Estate Finance. (3.0)** Areas of study include: FHA, VA and conventional mortgages, counseling in real estate finance, closing costs comparison, minimizing "red tape", credit and property evaluation, qualifying processes and creative financing; emphasis will be placed on both the technical aspects of real estate financing and practical applications of actual transactions; use of case studies should enhance participant's knowledge of real estate.

**CEU 5023. Residential Selling Strategies. (3.0)** This course is designed to provide the student with a working knowledge of alternative marketing and selling strategies that can be employed to provide professional service in the real estate industry. The student will be exposed to a systems approach to marketing and selling that satisfies two objectives: (1) flexible enough for a student to design an approach that meets local conditions, and (2) serve as a standard to evaluate other marketing and selling approaches. The emphasis is on having the student think through the consequences of various marketing and selling strategies based on the long-term objective of providing professional service. With this understanding the student will be able to formulate a plan for marketing and selling services that satisfies the standards established in the real estate industry.

**CEU 5024. Real Estate Investing and Management. (3.0)** The purpose of this course is to provide the basic tools for evaluating real estate investments and for managing them after they are acquired. Topics covered include investment analysis, valuation, financing, leases and landlord/tenant law. The course is designed primarily for the small investor and for residential real estate agents desiring a basic background in real estate investments.

**CEU 5025. Real Estate Brokerage. (3.0)** An overview of brokerage and office management including listings, sales, personnel and advertising, with special emphasis on math, contracts and closings; will assist in preparing for Tennessee Broker's examination. Prerequisite: Real Estate Fundamentals or special permission.

**CEU 5701. Motor Carrier Rates. (3.0)** Introduction to establishing regulated rate and pricing structure of Motor Common Carriers. Classification of commodities, territorial division of different publishing bureaus, construction, application and use of various tariffs by territory and commodity.

## SCHOOL OF EDUCATION

**CEU 4306. Beginning Social Dance. (2.0)** Basic techniques in foxtrot, waltz, tango, cha-cha, rumba, swing and disco dances.

**CEU 2455. Scuba Diving. (3.0)** The techniques of safe skin diving. The basic psychology as related to skin diving and safety aspects of the sport. Prerequisite: Ability to swim in deep water and/or permission of instructor.

**CEU 2504. Strategies and Approaches to Educational Change. (3.0)** Specific preparation in goal setting, problem solving, making contracts, team building and resolving inter-group conflicts, together with an overview of the change agent role.

**CEU 2514. Parenting Exceptional Children. (3.0)** Understanding of handicapped and handicapping conditions and methods for facilitating growth and learning.

**CEU 2603. Humanistic Education Development of Value Strategies for the Classroom. (3.0)** Individual discovery and learning how to clarify personal and professional values. Practical demonstrations and practices in values techniques skills and ideas.

**CEU 3000. Beginning Yoga. (3.0)** Basic yoga techniques to develop flexibility and strength and to increase energy and relaxation. Lecture and practice.

**CEU 3010. Intermediate Yoga. (3.0)** Theory and practice. Focuses on developing precision in hatha yoga postures (asanas) and breathing exercises (pranayama). Prerequisite: PE. 3000, or consent of instructor.

**CEU 3020. Relaxation and Stress Reduction. (3.0)** Exercise and relaxation techniques for reduction of mental and physical stress. Emphasis on development of self-management skills in relation to stress reduction.

**CEU 3030. Physical Fitness Activities. (3.0)** Teaching of calisthenics, conditioning activities and stretching exercises with emphasis on fitness, strength and flexibility. Proper techniques and the specific purpose of each activity will be emphasized.

**CEU 4501. Rapid Reading. (3.0)** Newest technique in speed reading through the use of the multiphased Perceptoscope designed to develop each student's abilities in reading by phrase and thought units. Many students learn to read over 1,000 words per minute as compared to the average adult rate of 250 words per minute.

**CEU 6002. GRE Review. (.8)** This activity is provided for those individuals who desire to specifically prepare for taking the GRADUATE RECORD EXAMINATION. The meeting focuses on the functional and an individual test is provided each student in the cost of admission. Those enrolling should be scheduled for G.R.E. dates during the fall and winter quarters.

**CEU 6604. Introduction to Ecological Planning for Children and Youth. (3.0)** An introduction to methods and procedures used by classroom teachers, parents, community agency personnel and administrators with children and youth who have academic, behavioral and other problems. The course stresses the use of the ecological model.

**CEU 6605. Educational Health and Safety. (2.0)** Introductory information on Health and Safety with special emphasis on classroom application.

**CEU 6608. Learning Assessment of Children. (1.0)** In-service education for classroom teachers, teacher education for assessment of children with learning problems.

## SCHOOL OF ENGINEERING

**CEU 1504. Professional Engineering License Review—Civil. (3.0)** A review concentrating on the general areas covered on the Professional License Examination. Topics covered will be environmental engineering, concrete, steel, soils, highway engineering, engineering economy, structural engineering, and some aspects of fluid mechanics.

**CEU 1508. Professional Engineering License Review—Mechanical. (3.0)** A review of topics in Mechanical Engineering which include units, heat transfer, nuclear reaction and generation, thermodynamics, air-conditioning, steam, refrigeration, fluid flow,



aerodynamics, gas dynamics, pumps and fans, vibration, combustion, mechanics, and engineering materials.

**CEU 1509. Professional Engineering Review—EIT I. (3.0)** A review concentrating on the general areas covered on the Engineer-in-Training examination. Topics include mathematics, statics, dynamics, and strength of materials.

**CEU 1510. Professional Engineering Review—EIT II. (3.0)** The second of two review concentrating on the general areas covered on the day long Engineer-in-Training Examination. Topics include thermodynamics, fluid mechanics and electricity with emphasis on engineering economy.

**CEU 1511. Professional Engineering License Review—Electrical. (3.0)** Designed to prepare electrical engineers for the Professional License Examination. Topics include electronics, power, motors, and circuits.

**CEU 1513. Fundamentals of Blueprint Reading. (1.2)** A fundamental course for technicians, inspectors and plans examiners who must understand floor plans, elevation drawings and plot plans.

**CEU 1515. Blueprint Reading for the Building Trades. (3.0)** A course for the builders of residences and small commercial buildings to provide experience in reading different types of drawings and exposure to methods of construction.

**CEU 1516. Mathematics for Surveyors. (3.0)** Fundamentals of mathematics required to make surveying computations. Successful completion of this course will be counted toward any of the four surveying certificates.

**CEU 1550. Professional Engineering License Review—Chemical. (3.0)** Working problems in thermodynamics, fluid flow, heat transfer, reactor kinetics, material balance and other related areas.

**CEU 2002. Surveying Examination Review. (3.0)** Video tape. Designed for those individuals interested in preparing for the Professional Surveying Examination. Topics include: horizontal and vertical measurement, transit and traverse methods, traverse calculations, horizontal and vertical curve calculations, deed descriptions, and legal and moral aspects of land surveying.

**CEU 2012. Blueprint Reading for the Construction Industry. (3.0)** Instruction for students, craftsmen, technicians, and others who must interpret, understand, and use engineering drawings.

**CEU 2021. Review for Architecture License Examination. (3.0)** Designed to prepare architects for the state's professional examination. Subjects include: Environmental Analysis, Architectural Programming, Design and Technology, and Construction Administration.

**CEU 2026. Fundamentals of Surveying. (3.0)** This first course in the series is designed for persons with a limited knowledge of surveying who wish to increase their skills. Emphasis is placed on trigonometry, basic computations, and the measurement of horizontal and vertical distances.

**CEU 2027. Transit-Tape Surveying and Computations. (2.5)** This course emphasizes the use of the transit and tape in traversing and the use of data collected in the field. Horizontal and vertical curves are also covered.

**CEU 2028. Land Surveying. (3.0)** Emphasis is placed on the legal aspects of land surveying and astronomy.

**CEU 2029. Route Surveying and Subdivision Design. (2.5)** This course is an advanced course incorporating fundamentals of previous courses into a design project.

**CEU 2051. Review for Examination for Certified Electrical Contractor. (3.0)** Designed to prepare persons for the examination (often referred to as "Master Electrician") required by the Metropolitan Government of Nashville and Davidson County. Definitions, interpretation of the National Electric Code, and the working of appropriate problems.

**CEU 6101. Industrial Occupational Safety and Health I. (3.0)** An in-depth study of the Occupational Safety and Health Act of 1970 will be made, as it its content and meaning. The Tennessee Occupational Safety and Health Act of 1972 will be reviewed.

**CEU 6102. Industrial Occupational Safety and Health II. (3.0)** Second segment of three-part series. Covers more specific areas of safety such as: flammable and combustible liquids, personal protective equipment, compressed gas and air equipment, hand and portable power tools and equipment, welding, cutting and brazing, special industries-pulp, paper and paperboard mills, textiles, bakery equipment, sawmills and agriculture operations, standard industrial classifications, target industries and health target areas.

**CEU 6103. Industrial Occupational Safety and Health III. (3.0)** Third segment of three-part series. Covers rules of construction, S.I.C. Coding, safety and health provisions, safety training, cranes, elevators, signals and barricades, traffic control for state and highway construction, use of explosives, concrete forms and shoring, and demolition.

**CEU 6107. Tosha Course for Laymen. (3.0)** An introductory course for employers and employees. The course covers the rules, standards and regulations of the Tennessee Occupational Safety and Health Act. Video taped course.

## SCHOOL OF NURSING

**CEU 4036. Nursing Pharmacology. (3)** Offers students a comprehensive base to the understanding of drugs and chemicals that affect tissues. Mechanism of drug action, drug fate, adverse effects, and response assessment.

**CEU 4045. Physical Assessment of the Adult. (3)** Provides registered nurses with basic skills in physical assessment, allowing them to function at a screening level. All participants should have knowledge of basic anatomy and physiology.

# COOPERATIVE AGRICULTURAL RESEARCH PROGRAM

**Handy Williamson, Ph.D.,  
Director**

## OVERVIEW OF CARP

The Cooperative Agricultural Research Program (CARP) at Tennessee State University (TSU), as funded under Section 1445 of Public Law 95-113, is initiated under serious commitment to those purposes for which funds are provided. The two-fold mission of the TSU Cooperative Agricultural Research Program is based upon aspects of stated missions of the University and the United States Department of Agriculture (USDA). The first aspect of the mission is to increase scientific knowledge and to produce technical information and outcomes that will contribute to the development and maintenance in both Tennessee and the United States of agricultural industry and rural community structures. In a more specific sense, this entails the development and improvement of the rural home and rural life sectors and the promotion of human welfare and world peace. The second focus of the mission, a pre-condition of the first, is to encourage faculty and students to engage in research in designated priority areas and to enhance development of research capability at TSU.

The Cooperative Agricultural Research Program combines the best efforts of over thirty scientists, representing over eight departments and four schools, who guide their scientific inquiry in seven Program Areas, approved by the Science and Education Administration-Cooperative Research (SEA-CR), United States Department of Agriculture (USDA). Since its beginning, over ten years ago, the Program has benefited from funding from USDA in excess of \$6 million. Over twenty-three projects have been successfully completed and thirty-nine projects are active today.

The scientists in the TSU/CARP are acutely aware that Tennessee has more than its fair share of disadvantaged people and of small, poverty-level farmers. We recognize the pressures of growing population on natural resources and are aware of that stress which urbanization and increased social change places on the individual and on families. Moreover, we are aware that we are partners in a larger agricultural effort concerned with feeding a growing world population.



Therefore, every effort is exerted precisely to conduct research and develop information which lead to improving the quality of life.

**THE FOCUS ON STUDENTS**

Students are encouraged to participate in CARP's activities as graduate research assistants or as undergraduate research technicians. At the M.S. level, students may simply make inquiry with the department chairman or with the professor who directs an ongoing CARP project within the department. Mostly all CARP projects have funds designated to provide financially supported research experience for graduate students. More than fifteen masters' theses have been successfully completed under this program and ways are being sought to expand student opportunities. Undergraduate students also participate in CARP's research and are carried as paid research technicians on many of the projects. The primary benefit to undergraduate students is the opportunity to obtain financial support and to complement his/her undergraduate education with meaningful exposure to the exciting world of scientific inquiry.

**THE SEVEN AREAS OF CONCENTRATION**

1. Research to Improve Economic Opportunities for Rural People in Tennessee
- 2 Research on the Effect of Chemical Residues and Farm Wastes on the Environment
3. Research to Develop Trees to Enhance the Environments of Rural and Urban Areas
4. Research on Food, Nutrition and Health
5. Research on Improving Systems Management Practices (Livestock) for Limited Resource Persons in Rural Tennessee.
6. Research on Social and Economic Improvement of the Level of Living of Limited Resource Farm Families
7. Research on Plant Mutation and on Genetic Improvement of Plant Varieties



# THE GRADUATE SCHOOL

James H. Reeves, Ed.D., Dean

Graduate studies leading to the Master's degree at Tennessee State University were authorized by the General Assembly in 1941, and programs in teacher education were initiated during the following year. Sometime later the Graduate School was established, and several other graduate offerings were added.

Authorization to offer the Specialist in Education degree was granted in 1974. Authorization to offer the Doctorate in Education was granted in 1980.

Currently, the following graduate degrees and major fields were offered:

**MASTER OF ARTS**  
Biology  
English  
History  
Speech Communication and Theatre

**MASTER OF ARTS IN EDUCATION**  
  
Administration and Supervision  
Adult Education  
Business Education  
Elementary Education  
Health and Physical Education  
Home Economics Education  
Vocational Industrial Education  
Music Education  
Reading  
Secondary School Instruction  
Special Education

**MASTER OF BUSINESS ADMINISTRATION**

**MASTER OF EDUCATION**  
  
Administration and Supervision  
Adult Education  
Business Education  
Elementary Education

Guidance and Counseling  
Health and Physical Education  
Home Economics Education  
Vocational Industrial Education  
Music Education  
Psychology  
Reading  
Secondary School Instruction  
Special Education

**MASTER OF SCIENCE**  
Agricultural Sciences  
Biology  
Chemistry  
Guidance and Counseling  
Music Education  
History  
Psychology  
Recreation  
Speech Communication and Theatre

**MASTER OF CRIMINAL JUSTICE**  
Joint Program with MTSU

**MASTER OF ENGINEERING**

**MASTER OF PUBLIC ADMINISTRATION**

**SPECIALIST IN EDUCATION**  
Administration and Supervision  
Curriculum and Instruction

**DOCTORATE IN EDUCATION**  
Administration and Supervision  
Curriculum and Instruction  
Psychology and Guidance

Requirements for these programs are described in the current Graduate School Bulletin.

Further information may be obtained by writing to:

The Dean of the Graduate School  
Tennessee State University  
3500 Centennial Boulevard  
Nashville, TN 37203

All applications, test scores, and transcripts should be mailed to the above address.

Doctor of Education (Ed.D) degree applicants must submit all application materials at least six (6) weeks before the beginning of the term for which entry is intended.



# UNIVERSITY PERSONNEL AND INSTRUCTIONAL FACULTY

THE INSTRUCTIONAL FACULTY			
THE GRADUATE SCHOOL			
James Reeves	EdD	Dean	
Tyree Miller	PhD	Asso Dean	
SCHOOL OF AGRICULTURE AND HOME ECONOMICS			
Roland Norman	PhD	Dean	
Rural Development			
Gul M. Telwar	EdD	Professor (Head)	
James Simmons	PhD	Asst Prof	
(Adjunct and Research Faculty)			
Surenda P Singh	PhD		
Rex Butler	MS		
Animal Science			
Roland Norman	PhD	Professor	
Constantine Fenderson	PhD	Asso Prof (Act Head)	
Plant Science			
Hazo Carter	PhD	Professor	
Desh R. Duseja	PhD	Asso Prof	
Kenneth Hillsman	PhD	Asst Prof (Head)	
Everette Holmes	MS	Instructor	
Home Economics			
Esen Ozgener	EdD	Professor	
Dolores A. Harris	MS	Professor	
Ruth A. McDowell	MEd	Asso Prof	
Hazel B. Jackson	PhD	Asso Prof (Head)	
Geraldene Johnson	EdD	Asso Prof	
Luther B. Franklin	MS	Asst Prof	
SCHOOL OF ARTS AND SCIENCES			
Robert J. Hudson	PhD	Dean	
Wendolyn Y. Bell	PhD	Asso Dean, Arts	
Clinton M. Lipsey	PhD	Asso Dean, Sciences	
Art Education			
Theodore J. Jones	MFA	Professor	
Gregory D. Ridley, Jr.	MA	Asso Prof	
Gus Baker	MFA	Asso Prof	
Herman Beasley	EdD	Asso Prof (Head)	
Geraldine Pletcher	PhD	Asst Prof	
Paul G. Zepelinsky	MA	Asst Prof	
Viola Wood	MFA	Asst Prof	
Nina Lovelace	MS	Instructor	
Biological Sciences			
Edward L. Risby	PhD	Professor (Head)	
John Mallette	PhD	Professor (Asso VP Research)	
Gus Tomlinson	PhD	Professor	
Rother R. Johnson	PhD	Professor	
Prem N. Narula	PhD	Professor	
Frederick D. Smith	DVM	Professor	
James A. Campbell	EdD	Professor	
Prem S. Kahlon	PhD	Professor	
James Wilson	PhD	Professor	
Alexander C. Wells	PhD	Asso Prof	
Jacqueline Martin	PhD	Asso Prof	
James Adams	PhD	Asso Prof	
Gregory Komives	PhD	Asso Prof	
Marion Williams	PhD	Asso Prof	
Robert F. Newkirk	PhD	Asso Prof	
Katie K. White	MS	Asst Prof	
William Cumming	MA	Asst Prof	
Eva B. Landers	MS	Instructor	
Alice C. Smith	MS	Instructor	
Martha C. Stratton	MAT	Instructor	
Chemistry			
Frederick Humphries	PhD	Professor (President)	
Lonnle Haynes	PhD	Professor (Head)	
Ruby P. Torrey	PhD	Professor	
Andrew Bond	PhD	Professor (Dean, Allied Health)	
Edward Covington	PhD	Professor (Coord)	
Fu-Ming Chen	PhD	Professor	
David Holder	PhD	Asso Prof	
Rama I. Mani	PhD	Asso Prof	
Gilbert Senter	MS	Asso Prof	
Audrey Prather	MS	Asst Prof	
Rudolph Woodberry	MS	Asst Prof	
Ying-Ming Lin	PhD	Asst Prof	
Communications			
Jamye C. Williams	PhD	Professor (Head)	
William D. Cox	MA	Asso Prof	
J. Weldon Stice	PhD	Asso Prof	
Donald Page	PhD	Asst Prof	
Harriette L. Allen	PhD	Asst Prof	
Herman Brady	MS	Instructor	
Sandra Holt	MS	Instructor	
Karen F. Brown	MS	Instructor	
Criminal Justice			
David K. Wheaton	PhD	Professor	
Larry Woods	JD	Asso Prof	
C. Bruce Mallard	PhD	Asst Prof (Head)	
Richard Mason	JD	Asst Prof	
Loren Galters	MS	Asst Prof	
English			
Robert J. Hudson	PhD	Professor (Dean)	
Alberta G. Barrett	PhD	Professor	
McDonald Williams	PhD	Professor (Dir Honors Program)	



Tyree Miller			PhD	Professor (Asso Dean Graduate School)	Philosophy		
Clayton C. Reeve			PhD	Professor (Head)	John H. Arthur	PhD	Asso Prof (Head)
Helen R. Houston			DA	Professor	William H. Shaw	PhD	Asso Prof
Dorothy Samuel			MA	Asso Prof	Physics and Mathematics		
Jo H. Railsback			PhD	Asso Prof	Calvin E. King	PhD	Professor
Donald Menchise			PhD	Asso Prof	Win Myint	MS	Professor
Wayne Billings			PhD	Asso Prof	Donald D. Savoy	MA	Professor
Barbara J. Conder			PhD	Asso Prof	Patricia G. Hull	PhD	Professor
Michael Darby			PhD	Asso Prof	Ronald D. Atkinson	PhD	Professor
Peter Jordan			PhD	Asso Prof	Sterlin N. Adams	MS	Asso Prof
Mildred B. Peters			PhD	Asso Prof	Chris L. Terrill	PhD	Asso Prof
John D. Wise*			PhD	Asso Prof	Charles A. Williams	MA	Asso Prof
Vesta Wheaton			MS	Asst Prof	Robert H. Barnes*	MS	Asso Prof
Helen S. Cotton			EdS	Asst Prof	Delmar D. Deboer	PhD	Asso Prof
Doris M. Daniels			MA	Asst Prof	John C. Propes	PhD	Asso Prof
Michael E. Doneson			MA	Asst Prof	Roberta A. Dabney	PhD	Asso Prof
*On Leave					Raymond Richardson	PhD	Asso Prof (Head)
James L. Head			PhD	Asst Prof	Willard Smith	PhD	Asst Prof (VP Manage- ment Services)
Asalean Springfield			PhD	Asst Prof	Eddie C. Paramore	PhD	Asst Prof
Judy Simpson			PhD	Asst Prof	Sandra N. Scheick	PhD	Asst Prof
Johanna L. Grimes			MA	Asst Prof	Mary A. Love	MS	Asst Prof
Monetha R. Reaves			DA	Asst Prof	Nancy R. Ledet	MA	Asst Prof
James W. Byrdsong			MS	Asst Prof	Jeanetta Williams	MA	Instructor
Gloria Johnson			MA	Asst Prof	*On Leave		
Hazel M. Cothran			MA	Instructor	Sociology		
Suchindran Chatterjee			PhD	Instructor	Edna C. Masuoka	PhD	Professor
Alonzo Moody			MA	Instructor	Andrew Jackson	PhD	Asso Prof
Louise R. Watkins			MA	Instructor	Edward S. Temple	MS	Asso Prof (Coach)
Timothy Quain			MA	Instructor	Levi Jones	PhD	Asso Prof (Head)
Government & Public Affairs					Baquar A. Husaini	PhD	Asso Prof
Hoyt King			PhD	Asso Prof (Head)	Ernest C. Rhodes	PhD	Asso Prof
Alphonse Thompson			PhD	Asso Prof	Nancy L. Hendrix	PhD	Asso Prof
Harry W. Fuchs			PhD	Asso Prof	Clinton M. Lipsey	PhD	Asso Prof (Asso Dean)
H. Coleman McGinnis			PhD	Asso Prof	Lynn E. Dwyer	PhD	Asst Prof
Bruce Rogers			PhD	Asso Prof	Nora L. Roy	MA	Asst Prof
Paul DuBois			PhD	Asso Prof	Dorothy A. Stephens	MA	Asst Prof
Arie Halachmi			PhD	Asso Prof	Eugene Grisby	PhD	Asst Prof
Julian Blackshear			JD	Asst Prof	Social Welfare		
Jyotsna Paruchuri			MA	Asst Prof	Benjamin Mason	PhD	Asso Prof (Head)
Nancy Hendrix			PhD	Asst Prof	Robert Castor	PhD	Asst Prof (Dir, Center on Aging)
History & Geography					Roderic Burton	MSSW	Asst Prof
Samuel B. Smith			PhD	Professor	Waldine DeBerry	MSW	Asst Prof
Alonzo T. Stephens			PhD	Professor	Frances Hempstead*	MSSW	Field Coordinator
George L. Davis			PhD	Professor	Eugenia Turner	MSSW	Field Instructor
H. Leon Prather			PhD	Professor	Hollace Brooks	MSSW	Instructor
Paul Phillips			PhD	Professor	SCHOOL OF ALLIED HEALTH PROFESSIONS		
John W. Cooke			PhD	Professor	Andrew Bond	PhD	Dean
Lois C. McDougald			MA	Asso Prof	Medical Records		
Samuel H. Shannon			PhD	Asso Prof	Lois Jenkins	BA, RRA	Dept. Head
Joseph H. Udelson			PhD	Asso Prof	Dental Hygiene		
Bobby Lovett			PhD	Asso Prof (Act Head)	Elzer Chandler	BS, RDH, MA, Director	
Phyllis K. Leffler*			PhD	Asso Prof	Eloise Jackson	EdS	
Harriett A. Peterson			JD	Asst Prof	Eva Morris	BS, RDH	
Jimmuir Cotton			MS	Asst Prof	Thedis H. Newbern	BS, RDH, MS	Instructor
James E. Haney			PhD	Asst Prof	Nancy Austin	BS, RDH,	Asst Prof
Juanita Gaston			PhD	Asst Prof	Marion Patton	MEd	
Sandra H. Franklin			MA	Asst Prof	Eileen M. Ellis	CDA, BS,	Asst Prof
Elizabeth H. McClain			MS	Asst Prof	Toni C. DeBiase	RDH, EdM	
Johnny L. Burchett			MS	Instructor	Health Care, Administration and Planning	BS, RDH, MS	Instructor
*On Leave					Donald T. Watson	MPH, JD	Director
Modern Foreign Languages					Beverly Bass	MPA	Asst Prof
Wendolyn Y. Bell			PhD	Professor (Asso Dean)	William Wilks	MPH	Asst Prof
Joan C. Elliott			PhD	Professor (Head)			
James C. Williams			PhD	Asso Prof			
Martin O. Deschenes			PhD	Asso Prof			
Music							
Guy A. Bockman			PhD	Professor (Coord)			
Ralph Simpson			PhD	Professor (Head)			
William O. Smith			PhD	Professor			
Clifford W. Watkins			PhD	Professor			
Edward Graves			MS	Asso Prof			
Donald E. Barrett			MMus	Asso Prof			
Carol E. Stone			MMus	Asso Prof			
Daniel E. Owens			EdS	Asst Prof (Dir, WT)			
Charlene McDonald			DMus	Asst Prof			
L. Grenetta Simpson			MA	Asst Prof			
Charlotte A. Rhodes			MMus	Asst Prof			
Thomas L. Davis			MMus	Instructor			



Speech Pathology and Audiology		
Harold R. Mitchell	PhD	Asso Prof (Director)
Jacqueline Mitchell	PhD	Asso Prof
James Stewart	PhD	Asst Prof
Juaquita E. Jackson	MS	Instructor
Marcella Mosely	MS	Instructor
Carol Barach	MS	Instructor
Zenobia Bagli	PhD	Asst Prof
Bertha Clark	MS	Instructor
Venessa Spells	MA	CI Supervision

Respiratory Therapy		
Cherryl Y. Ringgold	M.S., R.R.E.	Director

SCHOOL OF BUSINESS		
John T. Masten	PhD	Dean
Cecilie Crump	EdD	Asso Dean
James Elizy	EdD	Asst Dean, Undergraduate Studies
Tilden J. Currey	MCP	Asst Dean, Graduate Studies

Accounting and Law		
Charles Fiolen	PhD (CPA)	Professor (Head)
Lewis L. Laska	MBA	Asso Prof
Gouranga Ganguli	PhD	Asso Prof (Coord)
Lewis D. Howell	MS	Asso Prof
Thomas Rodgers	MBA (CPA)	Asso Prof
Kenneth R. Lea	PhD (CPA)	Asso Prof
Robert N. Holzmer	BS (CPA)	Asst Prof
Roger P. Nimmo	LLB	Asst Prof

Business Administration		
Richard Baxter	PhD	Professor (Coord)
Martin L. King	PhD	Professor (Coord, Marketing)
Louis Miller	PhD	Professor
John E. Rynolds	PhD	Professor (Head)
Eugene Upshaw	EdD	Professor
Bernard Tucker	PhD	Professor
Vassudeo Sardessla	PhD	Asso Prof
J. Byron Pennington	PhD	Asso Prof
Donald Richard	MBA	Asst Prof
Jerry Willson	MBA	Asst Prof
Millicent Lowmes	MBM	Instructor
Sharon Langford	MBA	Instructor (Dir. Pub. Service)

Business Education and Office Administration		
Augustus Bankhead	EdD	Professor (Head)
Donzaleigh Patterson	EdD	Professor
Cecilie Crump	EdD	Professor (Asso Dean)
James Elizy	EdD	Professor (Asst Dean)
Rena C. Elizy	EdD	Asso Prof
Camille D. Robinson	MS	Asst Prof
Thelma L. Baxter	MS	Asst Prof
Elizabeth Robertson	MBA	Asst Prof (Coord)
Wilma E. Rucker	MS	Instructor

Economics and Finance		
Robert Vowels	PhD	Professor
O. R. Desai	PhD	Professor
Elruce R. Boals	PhD	Professor
Abdel-Monem Fareed	PhD	Professor
John B. Hasty	PhD	Professor
S. Thomas Holbrook	PhD	Professor
John Y. Masten	PhD	Professor
Gayle D. Riggs	PhD	Professor
Charles E. Weis	PhD	Professor
Anis Salib	MA	Asso Prof
George B. Hartmann	PhD	Asso Prof (Head)
William A. Perry	PhD	Asso Prof
Madhu Paruchuri	MA	Asst Prof
Stanley M. Chervin	PhD	Asst Prof
Ernest Brown	PhD	Asst Prof

SCHOOL OF EDUCATION		
Everette Witherspoon	EdD	Acting Dean
Darlene Huddleston	EdD	Asso Dean
Richard Renfro	EdD	Asst Dean, Grad Studies

Curriculum and Instruction		
Bernard G. Crowell	EdD	Professor (VPAA)
Everette Witherspoon	EdD	Professor
Richard O. Renfro	EdD	Professor (Asst Dean)
Dorothy Draper	EdD	Professor
Darlene Huddleston	EdD	Professor (Asso Dean)
Edward N. Cullum	EdD	Professor
Evelyn Fancher	PhD	Professor (Dir Lib)
Gene H. Higdon	EdD	Asso Prof
Gretchen Payne	PhD	Professor (Head)
Dean Roberts	EdD	Asso Prof
Frank G. Hughes	EdD	Asso Prof
Arthur E. Franklin	MS	Asst Prof
Tee T. Peacock	MS	Asst Prof
Chrystal Partridge	PhD	Asst Prof
Gwendolyn Simmons	MS	Asst Prof

Education Administration		
John M. Crothers	EdD	Professor (VP Pub Ser)
Mildred S. Hurley	EdD	Professor
Franklin B. Jones	EdD	Professor (Head)
George W. Cox	EdD	Professor (Asst VP Acad Aff)
Paul F. Caraher	PhD	Asso Prof
Paul H. Madden	EdD	Asso Prof
Brent C. Poulton	PhD	Asso Prof (Coord Comm Educ)
Helen Bain	PhD	Asst Prof
Barbara Nye	MS	Instructor

Health, Physical Education & Recreation		
Audrey E. Lewis	EdD	Professor (Head)
Joe W. Gilliam	MA	Asso Prof (Coach)
Howard W. Green	MEd	Asso Prof
Edward A. Martin	MEd	Asso Prof (Coach Basketball)
John A. Merritt	MA	Asso Prof (Head Coach Football)
Arthur E. Simmons	MA	Asso Prof
Richard A. Miller	MS	Asso Prof
Fred M. Sawyer	PED	Asso Prof
Hezekiah Foreman	PhD	Asso Prof
Mary I. Crutchfield	MS	Asst Prof
Peggy Williams	MA	Asst Prof
Mary S. Watkins	EdS	Asst Prof
Richard Grooms	MS	Asst Prof
Edna F. Overall	MS	Asst Prof (Coach)
Samuel Abernathy	MS	Asst Prof
Jesse James	MS	Asst Prof
William A. Thomas	MS	Asst Prof
James I. Bass	MS	Instructor (Coach, Swimming)
Maxine O. Merritt	MS	Instructor (Coach)
Johnny L. Carey	MS	Instructor

Psychology		
Pearl G. Dansby	PhD	Professor (Head)
Calvin O. Atchison	EdD	Professor (VP Dev)
James Threlkill	EdD	Professor
Douglas J. Simpson	PhD	Professor (Coord Sch Psy Ser)
Joseph M. Cozy	PhD	Professor (Asso VPAA)
Roger W. Jones	PhD	Professor
David H. Marth	PhD	Professor
Helen R. Barrett	PhD	Professor
Harold L. Phelps	MS	Asso Prof
Dorothy Stewart	PhD	Asso Prof
M. Michelle Thomas	PhD	Asso Prof
John Joyner	PhD	Asso Prof (Dir, Couns Ctr)
Herbert H. Bell	PhD	Asso Prof
Deena Fuller-Smith	EdD	Asso Prof (Coord)
Brenda Dew	PhD	Asst Prof
Karen Edwards*	PhD	Asst Prof
Gloria Lewis	MS	Asst Prof
Alberta Heron	PhD	Asst Prof
James H. Stewart	EdD	Asst Prof
Mildred S. Crouch	MS	Instructor

\*On Leave



SCHOOL OF NURSING

Marion F Gooding	PhD	Professor (Dean)
Dorothy C. Edmond	Ed.D.	Asst Prof (Dir BS Prog)

Associate Degree Program

Christine R Sharpe	MA, MSN	Asso Prof
Carol C. Chapman	MA	Asst Prof
Margaret Dahlhauser	MS	Asst Prof
Helen S. Eastland	MS	Asst Prof
Jean M. Jenkins	MS	Asst Prof
B. Charlene Maynard	MSN	Asst Prof
Josephine Wright	MSN	Asst Prof
Mary Angela Mayo	MPH	Asst Prof
Maxine McKeown	MS, MSN	Asst Prof
Mary Kornguth*	MS	Asst Prof
Verla Vaughn	MSN	Instructor
Phyllis Clark	MSN	Instructor
Minnie Hairston	MSN	Instructor
Elizabeth E. Lund	MSN	Instructor
Karen Lusk	MSN	Instructor
Susan Meisels	MSN	Instructor
Lily Z. Pablo	MS	Instructor

\*On Leave

BSN Program

Linda Goode	MSN	Asst Prof
Mary Helms	MRE, MSN	Asst Prof

LIBRARY

Evelyn P Fancher	PhD	Professor (Dir)
Earline H. Hudson	EdS	Asso Prof
R. Irene Glaus	MLS	Asso Prof (Asst Dir)
Yildiz Binkley	MSLS	Asst Prof
Martha Parker	MLS	Asst Prof
Jessie Hughes	MLS	Asst Prof
Susan McCrumbley	MLS	Asst Prof
Feli Y. Propes	MLS	Asst Prof
Helen Chen	PhD	Asst Prof
Diana Jeffries	MLS	Asst Prof
Shirley Caldwell	MLS	Instructor
Joe D. McClure	MLS	Instructor
Mattie L. McHollin	MLS	Instructor
Joseph Riddick	MSLS	Instructor
Sharon Johnson	MLS	Instructor
Mindy Kronman	MLS	Instructor
Sandra Martin	MLS	Instructor
Vallie Pursley	MLS	Instructor
Joan B. Williams (P/T)	MSLS	Instructor

AEROSPACE STUDIES

Lt. Col. Charles E. Guthrie	MPA	Professor
Major David B. Sutherlin	MBA	Asst Prof
Capt. Michelangelo McCallister	MA	Asst Prof
Capt. Rufus N. Biggs	MEd	Asst Prof

EXTENSION & CONTINUING EDUCATION

James E. Farrell	PhD	Professor (Asso VP Pub Ser)
Ozie L. Adams	PhD	Professor
Joseph Morris	PhD	Professor
David C. Gandy	MS	Asso Prof
Charles Spencer	MS	Asst Prof
Alvin Wade	MS	Asst Prof
Richard Winston	MS	Asst Prof
Robert Boone	MS	Asst Prof
Lena P. Farrell	MS	Instructor

Reading & Special Education

Ruby W. Martin	EdD	Professor (Head)
Elnora O. Roane	PhD	Asso Prof

Dolores Mathis	PhD	Asso Prof
Carole F. Stice	PhD	Asso Prof
Barbara O'Connor	PhD	Asso Prof
Elliott Mellichamp	PhD	Asso Prof
Fannie W. Cathey	PhD	Asst Prof
Merriel Bullock	PhD	Asst Prof
Bobby L. Jones	PhD	Instructor
Mary Bess Hammer	MS	Instructor

SCHOOL OF ENGINEERING AND TECHNOLOGY

Edward I. Isibor	PhD	Dean
Andrew Ryal	PhD	Asst Dean
Mohan Malkani	PhD	Act Asso Dean

Architectural Engineering

Feng-chih Chen	PhD	Professor
Michael Samuchin	PhD	Professor (Head)
Nipha Kumar	MS	Asso Prof
Ronald Harris	BS	Asso Prof
Hinton C. Jones, Jr.	MS	Asso Prof

Civil Engineering

Edward I. Isibor	PhD, PE	Professor (Dean)
Macon G. Hinton	MSE, PE	Professor (Head)
Vasant Surti	PhD	Professor
Subodh Kumar	PhD	Asso Prof
Ajeya K. Upadhyaya	PhD	Asso Prof
Ida Watson	ME	Instructor

Electrical Engineering

Sidney Tetenbaum	PhD	Professor
Mohan J. Malkani	PhD	Professor
Santinderpaul Devgan	PhD	Professor (Head)
Robert Alexander	MS	Asst Prof
Eric Stearns	MS	Instructor

Mechanical Engineering

Yvonne Y. Clark	MS, PE	Asso Prof (Head)
Vadili Sastry	PhD	Asso Prof
Dilip Chaudhuri	PhD	Asso Prof
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Max L. Hailey	PhD	Asso Prof
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